



January 20, 2006

3888.02

Humboldt County Department of Health and Human Services
Division of Environmental Health
100 H Street, Suite 100
Eureka, California 95501

Attention: Mr. Mark Verhey

Subject: Groundwater Monitoring Report; Fourth Quarter 2005
Blue Lake Market; 410 Railroad Avenue, Blue Lake, California
LOP No. 12229

Dear Mr. Verhey:

LACO ASSOCIATES (LACO) is pleased to present the results of groundwater monitoring for the fourth quarter of 2005 at 410 Railroad Avenue, Blue Lake, California, to the Humboldt County Division of Environmental Health (HCDEH). This report was prepared on behalf of Mr. Pat Folkins.

Please call if you have any questions or concerns.

Sincerely,
LACO ASSOCIATES

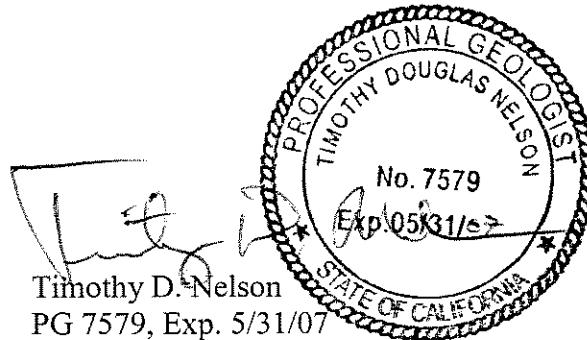
Gwendolyn Erickson
Staff Geologist

GJE:jg

Attachments

cc: Pat Folkins, Blue Lake Market

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GROUNDWATER MONITORING REPORT; FOURTH QUARTER 2005

Former Blue Lake Market; 410 Railroad Avenue, Blue Lake, California

LOP No. 12229; LACO Project No. 3888.02

INTRODUCTION

This report presents the cumulative results of groundwater monitoring conducted at the site since approximately 1995. Field activities associated with the fourth quarter monitoring event were performed on December 1, 2005. On December 5, 2005, SHN Consulting and Engineering (SHN) of Eureka, California conducted the quarterly sampling event at the Blue Lake Belting and Leather Works site (BLBLW), located immediately up-gradient of the Blue Lake Market site. Please refer to Table A below for the current groundwater monitoring regime. Monitoring well sampling protocol is included in LACO's *Standard Operating Procedures*, on file at your office. A location and site map are provided as Figures 1 and 2, respectively. Groundwater monitoring data and laboratory analytical results from the concurrent sampling with the Blue Lake Market monitoring wells at BLBLW was provided by SHN and is included as Attachment 1.

Table A: Sampling Event for December 1, 2005

MONITORING WELL ID	SCREENED INTERVAL (feet)	DTW (feet)	PURGE METHOD	WATER QUALITY PARAMETERS	ORGANIC ANALYTICALS	SAMPLING SCHEDULE
MW1	5-15	3.61	DHP	ORP, DO	TPHg, BTEX, MTBE	Quarterly
MW2	4-14	4.91		DTW Only	.	
MW3*	5-15	NA		ORP, DO	TPHg, BTEX, MTBE	
MW4	10-15	Dry		ORP, DO	TPHg, BTEX, MTBE	
MW5	10-15	3.81		ORP, DO	TPHg, BTEX, MTBE	

A key to abbreviations is provided in Attachment 2

* Sampled by SHN on December 5, 2005

SITE CHRONOLOGY

- **1990:** One 550-gallon underground storage tank (UST) was removed from the site.
- **December 1994:** Three monitoring wells (MW1 through MW3) and five temporary borings (B1 through B5) were installed.
- **July 2001:** Five temporary soil borings (B6 through B10) were installed.
- **September 2005:** Four temporary borings (B11 through B14) and two monitoring wells (MW4 and MW5) were installed.

- **1994 to present:** Groundwater monitoring was conducted.

HYDRAULIC GRADIENT AND HYDROGEOLOGY

Groundwater at the site is generally found between depths of approximately 4 and 14 feet. Site stratigraphy has been characterized by the presence of interbedded silty sands and silty gravels. Observed lithology is typical of fluvial and over-bank floodplain deposits. Powers Creek is located approximately 130 feet south-southeast of the former USTs, and Mad River is located approximately 2,000 feet south of the site. The local hydraulic gradient has historically been in the southern direction and is likely dominated by a combination of Powers Creek and Mad River.

The hydraulic gradient for this monitoring event was calculated by the three-point method using monitoring wells MW103, MW104, and MW106. Monitoring wells MW1, MW2, and MW3, which are typically used to calculate the gradient at the site (historical Groundwater Monitoring Reports), were not used to calculate the gradient during this quarter because hydraulic head data were not collected on the same day for those three wells (Table 2). Furthermore, wells MW1, MW2, MW4, and MW5 were not used to calculate the gradient because these wells are in a line, making three-point gradient calculations difficult (Figure 2). The potentiometric surface was generated using the hydraulic heads of the LACO and SHN monitoring wells and is presented in Figure 3 with the calculated gradient. Current and historic hydraulic gradients are presented in Table 1, current and historic hydraulic head data are presented in Table 2, and a copy of the field sampling data sheets is included as Attachment 3.

The calculated hydraulic gradient for the December 1, 2005, monitoring event is 0.01 feet per foot in a S62°E direction. While the calculated hydraulic gradient is consistent with historical gradient data, the distribution of contaminants across both sites suggests the dominant hydraulic gradient is in a more southerly direction (LACO 2005).

LABORATORY RESULTS

Laboratory analytical results from the December 1, 2005, quarterly sampling event are included below in Table B. Current and historical groundwater analytical data are included in Table 2, copies of the field sheet are presented as Attachment 3, and copies of the laboratory analytical reports for this reporting period are included as Attachment 4. Figure 4 presents current analytical results in each boring.

Table B: Analytical Results for December 1, 2005						
WELL	TPHg ($\mu\text{g/l}$)	Benzene ($\mu\text{g/l}$)	Toluene ($\mu\text{g/l}$)	Ethylbenzene ($\mu\text{g/l}$)	Xylenes ($\mu\text{g/l}$)	MTBE ($\mu\text{g/l}$)
MW1	1,300	9.1	ND<15	3.4	2.4	ND<50
MW2	1,500	ND<5.0	6.9	63	167	ND<30
MW4	Dry; Not Sampled					
MW5	1,400	27	12	42	24	ND<25

DISCUSSION OF GROUNDWATER RESULTS

Blue Lake Market

Current laboratory analytical data is compared to data of similar hydrologic conditions.

- *Monitoring Well MW1* - Current concentrations of total petroleum hydrocarbons as gasoline (TPHg) remain within the same order of magnitude as when groundwater sampling was initiated in approximately 1995. Benzene concentrations, for this time of year, have decreased an order of magnitude since sampling was initiated. Toluene has been non-detect (ND) since September 2002. Methyl tertiary butyl ether (MTBE) has been ND since August 1999.
- *Monitoring Well MW 2* - Though slightly decreased, the concentration of TPHg remains within the same order of magnitude as previous sampling events during this time of year. Benzene, toluene, ethylbenzene, and xylenes (BTEX) concentrations have decreased by an order of magnitude since the December 2003 sampling event. MTBE has been ND since August 1999.
- *Monitoring Well MW5* - TPHg concentrations in monitoring well MW5 are similar to those in monitoring well MW1, and BTEX concentrations appear to be an order of magnitude greater compared to monitoring well MW1. This is the first monitoring event for monitoring well MW5; therefore, concentration trends have yet to be established.

Comments from the laboratory case narrative are found in Attachment 3 and are indicative of a weathered and degraded gasoline plume.

Blue Lake Belting and Leather Works

Laboratory results from up-gradient BLBLW wells appear to be consistent within the range of results reported for historical monitoring events during periods of similar hydrologic conditions. However, TPHg concentrations were slightly increased in monitoring wells MW104 and

MW105, and slightly decreased in monitoring well MW103. Notably, monitoring well MW106 had unprecedented concentrations of TPHg and BTEX constituents during this monitoring event. Based on the distribution of contaminants between the two sites (LACO 2005), concentrations of TPHg in monitoring well MW106 likely came from the direction of monitoring well MW105.

CONCLUSIONS

Groundwater parameters including laboratory analytical results, groundwater elevations, and hydraulic gradient are consistent with that of previous monitoring events.

RECOMMENDATIONS

The next quarterly groundwater monitoring event is scheduled for March 2006.

REFERENCES

LACO. 2005. *Report of Findings: Boring and Monitoring Well Installation*; Blue Lake Market, 410 Railroad Avenue, Blue Lake California. LOP No. 12229 LACO No. 3888.02. November 28, 2005. 13 pages +Attachments.

LIMITATIONS

LACO ASSOCIATES has exercised a standard of care equal to that generated for this industry to ensure that the information contained in this report is current and accurate. LACO ASSOCIATES disclaims any and all liability for any errors, omissions, or inaccuracies in the information and data presented in this report and/or any consequences arising there from, whether attributable to inadvertence or otherwise. LACO ASSOCIATES makes no representations or warranties of any kind including, but not limited to, any implied warranties with respect to the accuracy or interpretations of the data furnished. It is known that subsurface conditions may change with time and under anthropologic influences. LACO ASSOCIATES assumes no responsibility of any third party reliance on the data presented and that data generated for this report represents information gathered at that time and at the indicated locations. It should not be utilized by any third party to represent data for any other time or location. The report is valid solely for the purpose, site, and project described in this document. Any alteration, unauthorized distribution, or deviation from this description will invalidate this report.

LIST OF FIGURES, TABLES, AND ATTACHMENTS

Figure 1: Location Map
Figure 2: Site Map
Figure 3: Hydraulic Gradient Map (12/01/05 & 12/05/05)
Figure 4: Analyte Concentration in Groundwater (12/01/05 & 12/05/05)

Table 1: Historic Hydraulic Gradient Data
Table 2: Monitoring Well Data and Groundwater Analytical Results

Attachment 1: SHN Field Data Sheets and Laboratory Report

Attachment 2: Key to Abbreviations

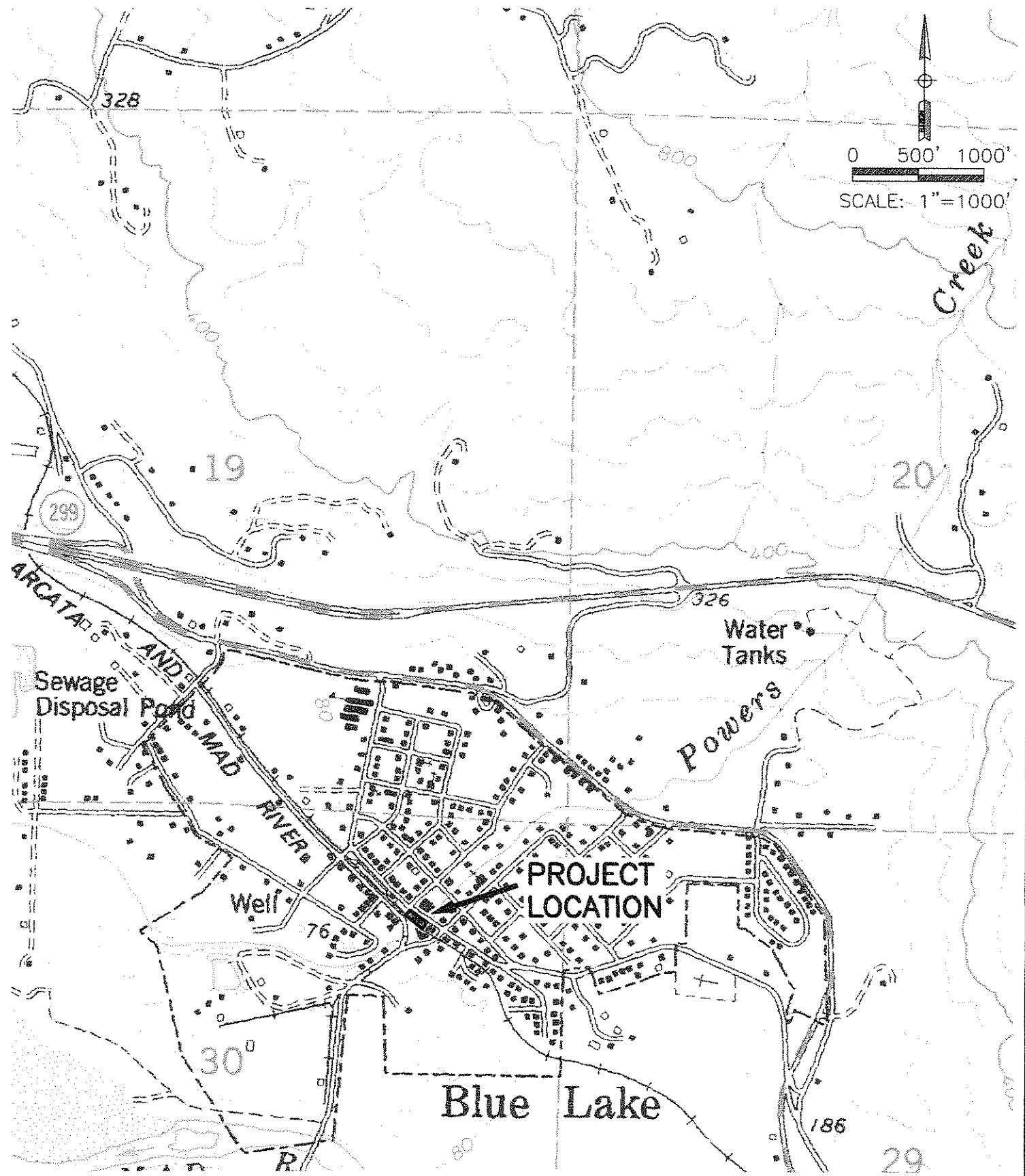
Attachment 3: Groundwater Sampling Field Data Sheets

Attachment 4: Laboratory Analytical Report



LACO ASSOCIATES
CONSULTING ENGINEERS
21 W 4TH ST. EUREKA, CA 95501 (707)443-5054

PROJECT	GROUNDWATER MONITORING REPORT	BY	RJM	FIGURE
CLIENT	PAT FOLKINS	DATE	1/12/06	1
LOCATION	BLUE LAKE MARKET	CHECK	YN	JOB NO.
LOCATION MAP		SCALE	1"=1000'	3888.02



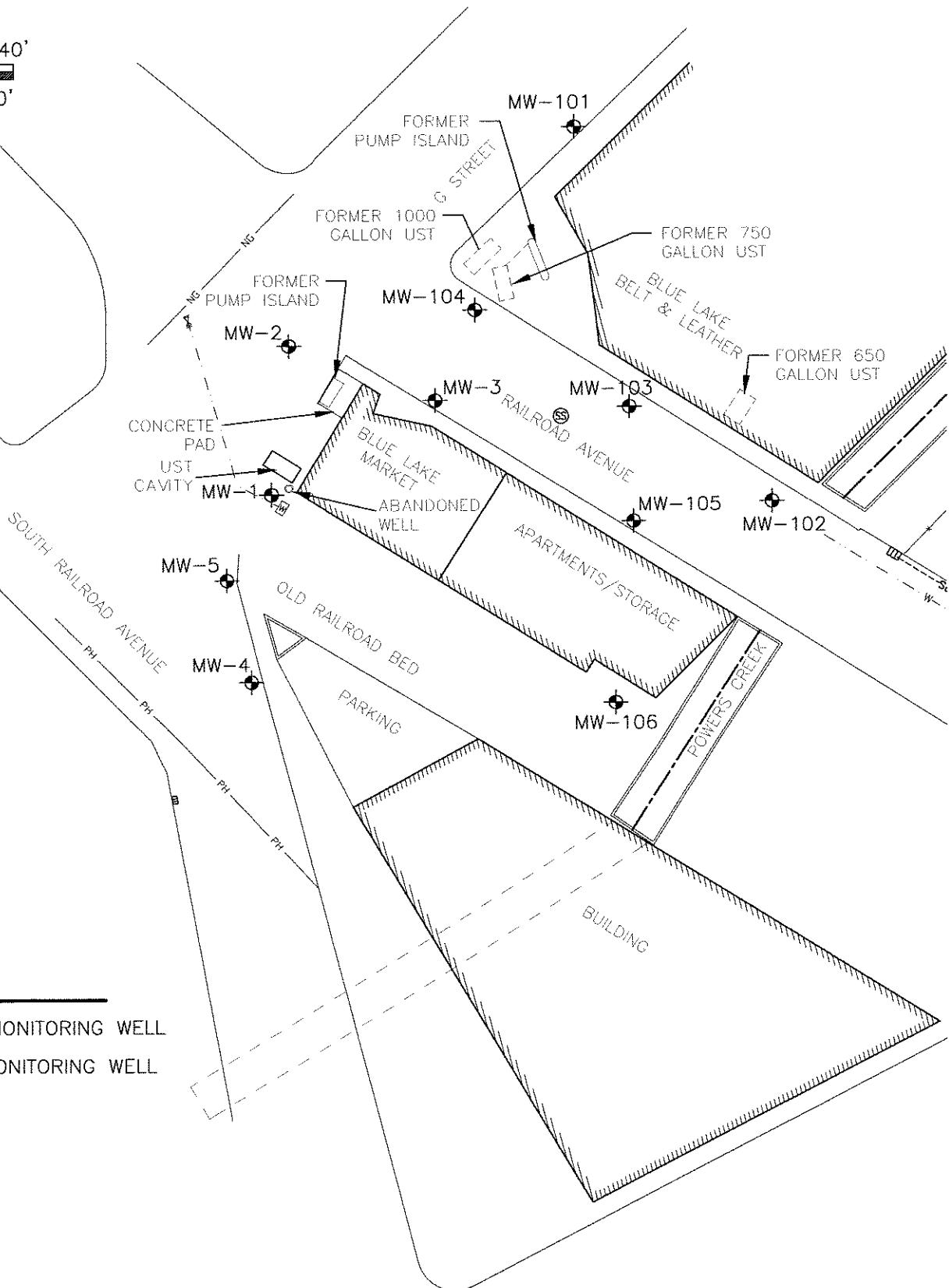


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PROJECT	GROUNDWATER MONITORING REPORT	BY	RJM	FIGURE
CLIENT	PAT FOLKINS	DATE	1/11/06	2
LOCATION	BLUE LAKE MARKET	CHECK	JF	JOB NO.
	SITE MAP	SCALE	1"=40'	3888.02



0' 20' 40'
SCALE: 1"=40'



LEGEND

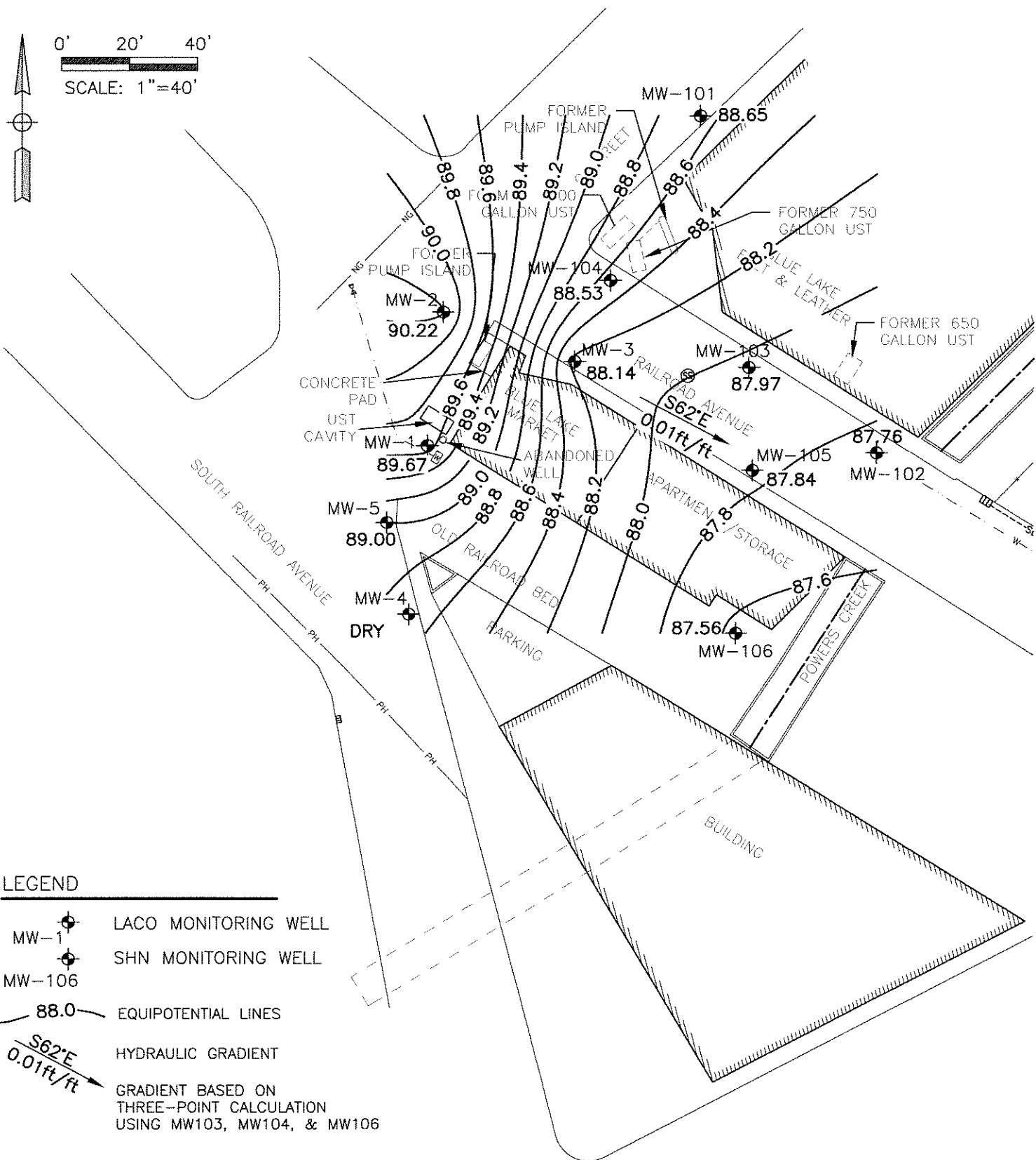
- MW-1 LACO MONITORING WELL
- MW-106 SHN MONITORING WELL



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PROJECT	GROUNDWATER MONITORING REPORT	BY	RJM	FIGURE
CLIENT	PAT FOLKINS	DATE	1/11/06	3
LOCATION	BLUE LAKE MARKET	CHECK		JOB NO.
	HYDRAULIC GRADIENT MAP (12/01/05 & 12/05/05)	SCALE	1"=40'	3888.02

0' 20' 40'
SCALE: 1"=40'





LACO ASSOCIATES
CONSULTING ENGINEERS
21 W 4TH ST. EUREKA, CA 95501 (707)443-5054

PROJECT	GROUNDWATER MONITORING REPORT	BY	RJM	FIGURE
CLIENT	PAT FOLKINS	DATE	1/11/06	4
LOCATION	BLUE LAKE MARKET	CHECK		JOB NO.
ANALYTE CONCENTRATION IN GROUNDWATER (12/01/05 & 12/05/05)			SCALE 1"=40'	3888.02

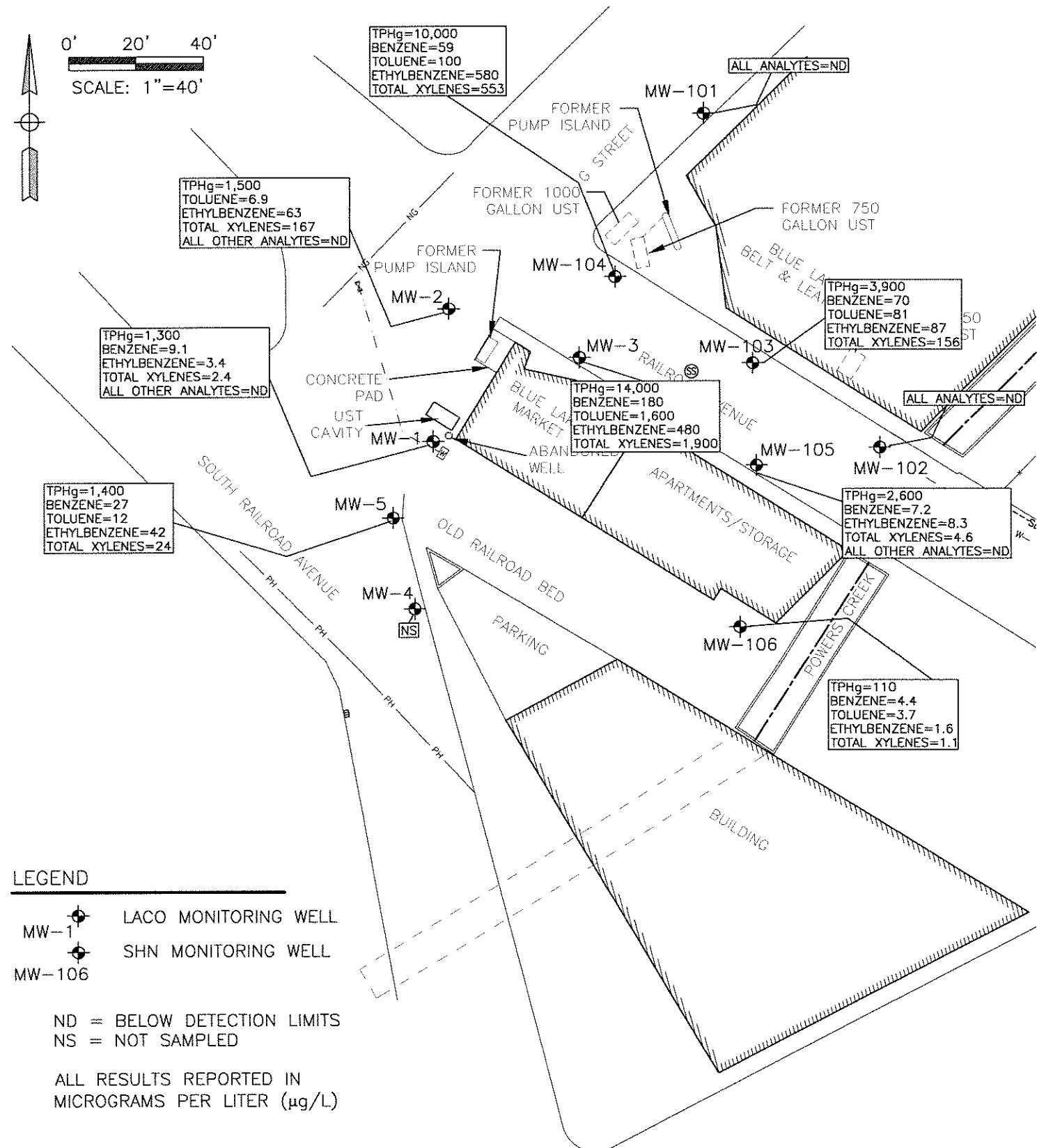


TABLE 1: HISTORIC HYDRAULIC GRADIENT DATA

Blue Lake Market
 410 Railroad Avenue, Blue Lake
 LOP No. 12229; LACO Project No. 3888.01

Date	Flow Direction	Gradient Slope
12/29/1994	SSE	1.90%
1/12/1995	SSE	9.50%
2/27/1995	SW	3.40%
3/22/1995	SW	3.50%
4/12/1995	S	1.90%
5/8/1995	SSW	2.00%
6/6/1995	SSW	2.10%
8/11/1995	SSE	3.10%
10/31/1995	SSE	3.50%
12/14/1995	SSE	2.10%
1/15/1996	SSE	1.00%
4/5/1996	SSW	1.90%
8/2/1996	SSE	2.20%
5/2/1997	S	1.90%
8/15/1997	S	0.80%
5/13/1998	S	1.90%
5/14/1999	SSW	1.60%
8/10/1999	SSE	0.90%
12/2/1999	SSW	1.90%
3/1/2000	S	1.52%
6/1/2000	SSW	1.59%
9/14/2000	S	3.07%
12/01/00	SE	8.30%
03/01/01	SW	1.20%
06/04/01	SW	2.10%
09/07/01	SW	2.50%
12/03/01	S	2.00%
03/13/02	SW	1.60%
06/05/02	SW	1.70%
09/03/02	SE	2.61%
01/02/03	SE	2.30%
03/03/03	---	---
06/02/03	S3E	1.80%
09/11/03	S14E	1.80%
12/01/03	S42E	1.29%
12/01/03	S22E	1.20%
03/03/04	S11E	1.45%
06/09/04	S17E	1.69%
09/02/04	N52W	1.19%
12/01/04	S2W	1.58%
03/01/05	S1E	1.27%
06/01/05	S12W	2.37%
09/01/05	S15E	1.2%
12/05/05	S62E	0.01ft/ft

TABLE 2: MONITORING WELL DATA AND GROUNDWATER ANALYTICAL RESULTS

Blue Lake Market
410 Railroad Avenue, Blue Lake, CA
LOP No. 1229; LACO Project No. 3888.01

Groundwater Measurements				Analytical Results						
WELL/ Sample Date	Well Head Elevation (feet msl)	Hydraulic Head (feet msl)	Depth to Water (feet)	TPHg	Benzene (ug/L)	Toluene (ug/L)	Ethylbenzene (ug/L)	Xylenes (ug/L)	MTBE (ug/L)	FOOT NOTES
MW-1										
12/29/1994	89.45	84.44	5.01	---	---	---	---	---	---	---
1/12/1995	85.35	4.10	2,000	53	16	42	49	49	---	
2/27/1995	83.22	6.23	---	---	---	---	---	---	---	
3/22/1995	82.97	6.48	---	---	---	---	---	---	---	
4/12/1995	83.59	5.86	1,100	48	25	49	59	59	---	
5/8/1995	83.11	6.34	---	---	---	---	---	---	---	
6/6/1995	82.60	6.85	---	---	---	---	---	---	---	
8/11/1995	78.99	10.46	---	---	---	---	---	---	---	
10/31/1995	77.30	12.15	4,100	280	37	63	46	46	---	
12/14/1995	84.69	4.76	---	---	---	---	---	---	---	
1/15/1996	84.97	4.48	---	---	---	---	---	---	---	
4/5/1996	83.79	5.66	4,200	189	189	230	370	ND<100	2	
8/2/1996	78.54	10.91	---	---	---	---	---	---	---	
5/2/1997	83.39	6.06	3,900	170	50	120	105	ND<100	1,2	
8/15/1997	78.20	11.25	4,700	610	75	88	81	ND<100	1,2	
5/13/1998	82.71	6.74	810	25	5	33	16	ND<25	1,2	
5/14/1999	82.81	6.64	2,400	220	38	96	57	97	1	
8/10/1999	78.45	11.00	6,800	850	110	470	298	ND<200	1,2	
12/2/1999	84.40	5.05	320	41	4.2	15	4.9	ND<40	2	
3/1/2000	84.34	5.11	5,200	270	28	45	36	ND<80	1,2	
6/1/2000	82.81	6.64	5,300	330	85	250	183	ND<200	1,2,4	
9/13/2000	77.31	12.14	4,600	699	37	110	25	ND<140	1,2	
12/1/2000	82.00	7.45	7,900	410	53	210	79	ND<200	1,3	
3/1/2001	83.05	6.40	970	88	12	41	20	ND<50	1,2	
6/4/2001	80.39	9.06	3,700	210	17	160	49	ND<1.3	2	
9/7/2001	77.35	12.10	3,100	690	30	53	37	ND<1.0	1	
12/3/2001	84.96	4.49	71	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	1,4	
3/13/2002	84.52	4.93	420	11	ND<5.0	5.4	3.8	ND<27	1,2	
6/5/2002	81.00	8.45	2,400	63	32	49	39	ND<70	1,2	
	93.28			Monitoring well top of casings resurveyed 7/29/02						
9/3/2002	81.27	12.01	3,800	210	29	ND<25	ND<110	1,2		
1/2/2003	88.72	4.56	400	ND<2.0	ND<4.0	ND<2.0	ND<50	ND<10		
3/3/2003	---	---	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<3.0		
6/2/2003	86.63	6.65	1,300	43	ND<30	29	9.6	ND<30	2, 5, 6	
9/11/2003	81.80	11.48	1,400	69	ND<14	ND<15	ND<8.0	ND<50	2	
12/1/2003	87.74	5.54	1,500	38	ND<20	19	14	ND<80	2, 5, 6	
3/3/2004	87.69	5.68	160	ND<0.50	ND<0.50	0.54	ND<0.50	ND<1.0	8	
6/9/2004	84.78	8.50	1,500	21	ND<28	33	11	ND<60	5, 6	
9/2/2004	81.55	11.73	1,000	37	ND<18	ND<5.0	ND<3.0	ND<40	2, 11	
12/1/2004	86.70	6.58	330	4.9	ND<4.0	1.7	0.91	ND<14	2, 11	
3/1/2005	87.32	5.96	990	ND<10	ND<15	ND<15	ND<7.0	ND<35		
6/1/2005	86.81	6.47	2,600	27	ND<30	18	10	ND<80	3, 6, 11	
9/1/2005	82.37	10.91	1,700	24	ND<25	ND<10	ND<10	ND<60	2, 6, 11	
12/1/2005	89.67	3.61	1,300	9.1	ND<15	3.4	2.4	ND<50		
MW-2										
12/29/1994	91.27	85.14	6.13	---	---	---	---	---	---	
1/12/1995	86.19	5.08	10,000	14	290	250	1,670	---		
2/27/1995	83.77	7.50	---	---	---	---	---	---		
3/22/1995	83.69	7.58	---	---	---	---	---	---		
4/12/1995	84.27	7.00	1,400	1.0	36	24	310	---		
5/8/1995	83.82	7.45	---	---	---	---	---	---		
6/6/1995	83.33	7.94	---	---	---	---	---	---		
8/11/1995	79.71	11.56	---	---	---	---	---	---		
10/31/1995	78.39	12.88	---	---	---	---	---	---		
12/14/1995	85.32	5.95	---	---	---	---	---	---		
1/15/1996	85.29	5.98	---	---	---	---	---	---		
4/5/1996	84.45	6.82	5,500	7.3	85	92	720	ND<5.0		
8/2/1996	79.22	12.05	---	---	---	---	---	---		
5/2/1997	84.00	7.27	5,800	12	95	170	860	ND<50	2	
8/15/1997	78.45	12.82	---	---	---	---	---	---		
5/13/1998	83.39	7.88	3,700	5.8	28	188	510	ND<25	1,2	
5/14/1999	83.46	7.81	9,800	21	210	380	1,930	13	1	
8/10/1999	78.73	12.54	2,400	15	40	67	306	ND<25	1,2	
12/2/1999	85.07	6.20	14,000	33	110	560	2,290	ND<50		
3/1/2000	84.84	6.43	7,000	8.6	86	160	820	ND<30	1,3	
6/1/2000	83.45	7.82	12,000	19	200	290	1,630	ND<30	1,3	
9/13/2000	78.46	12.81	---	---	---	---	---	---		
12/1/2000	85.23	6.04	9,800	19	120	220	1,010	ND<10	1,2	
3/1/2001	83.73	7.54	3,000	9	43	100	502	ND<10	3	
6/4/2001	81.22	10.05	2,300	5	8.4	35	229.3	ND<1.3	2	
9/7/2001	78.42	12.85	---	---	---	---	---	---		
12/3/2001	85.48	5.79	4,700	7.3	43	110	658	ND<1.0	1	
3/13/2002	84.83	6.44	15,000	29	290	640	2,600	ND<70	1,2	
6/5/2002	81.95	9.32	3,400	9.8	21	87	253	ND<11	1,2	
	95.13			Monitoring well top of casings resurveyed 7/29/02						
9/3/2002	82.23	12.99	Insufficient water in the well to obtain a sample	12,000	ND<25	97	470	1,910	ND<150	
1/2/2003	89.35	5.78		270	ND<1.50	ND<5.5	2.4	12.3	ND<3.0	
3/3/2003	87.76	7.37		860	0.76	6.6	28.0	75.0	ND<3.0	5
6/2/2003		7.81								
9/1/2003	82.47	12.66	3,900	28	53	190	468	ND<35	2, 5	
12/1/2003	88.02	7.11	6,700	14	62	330	1,130	ND<30	3, 5	
3/3/2004	88.18	6.95	2,200	1.2	2.4	56	161	ND<1.0	5	
6/9/2004	85.70	9.43	970	ND<3.0	ND<10	22	58	ND<3.0	2, 3, 5	
9/2/2004	81.32	13.81	2,600	16	26	92	258	ND<30	3, 10	
12/1/2004	87.25	7.88	2,200	5	15	110	291	ND<30	3, 5	
3/1/2005	87.80	7.33	1,100	ND<2.0	10	19	55.9	ND<3.0		
6/1/2005	87.51	7.62	970	1.1	ND<15	9.0	21.1	ND<1.0	2, 11	
9/1/2005	82.80	12.33	3,200	19	57	130	410	ND<30	3, 5	
12/1/2005	90.22	4.91	1,500	ND<5.0	6.9	63	167	ND<30		

TABLE 2: MONITORING WELL DATA AND GROUNDWATER ANALYTICAL RESULTS

Blue Lake Market
410 Railroad Avenue, Blue Lake, CA
LOP No. 12229; LACO Project No. 3888.01

WELL/ Sample Date	Groundwater Measurements			Analytical Results							
	Well Head Elevation (feet msl)	Hydraulic Head (feet msl)	Depth to Water (feet)	TPHg (ug/L)	Benzene (ug/L)	Toluene (ug/L)	Ethylbenzene (ug/L)	Xylenes (ug/L)	MTBE (ug/L)	FOOT NOTES	
MW-3											
12/29/1994	91.61	84.66	6.95	---	---	---	---	---	---		
1/12/1995	85.38	6.23	21,000	130	590	170	770	---	---		
2/27/1995	84.63	6.98	---	---	---	---	---	---	---		
3/22/1995	84.53	7.08	---	---	---	---	---	---	---		
4/12/1995	83.98	7.63	14,000	130	438	360	2,080	---	---		
5/8/1995	83.61	8.00	---	---	---	---	---	---	---		
6/6/1995	83.09	8.52	---	---	---	---	---	---	---		
8/1/1995	79.18	12.43	---	---	---	---	---	---	---		
10/31/1995	77.59	14.02	---	---	---	---	---	---	---		
12/14/1995	84.89	6.72	---	---	---	---	---	---	---		
1/15/1996	85.09	6.52	---	---	---	---	---	---	---		
4/5/1996	84.31	7.30	11,000	120	330	260	980	ND <500	2		
8/2/1996	78.73	12.88	---	---	---	---	---	---	---		
5/2/1997	83.64	7.97	7,600	46	110	79	459	ND <100	2		
8/15/1997	78.18	13.43	7,600	160	440	160	630	ND <100	2		
5/13/1998	83.16	8.45	9,100	76	280	280	1,390	ND <500	2		
5/14/1999	83.25	8.36	5,200	74	160	180	640	148			
8/10/1999	78.42	13.19	14,000	130	310	130	510	ND <200	1,2		
12/2/1999	84.32	7.29	6,400	87	340	200	810	ND <300	2		
12/2/1999	Duplicate		5,200	80	260	210	710	ND <400	2		
3/1/2000	84.36	7.25	7,200	64	390	180	730	ND <150	1,3		
6/1/2000	83.25	8.36	7,100	73	330	170	630	ND <140	2		
9/13/2000	77.68	13.93	---	---	---	---	---	---	---		
12/1/2000	83.54	8.07	13,000	79	290	230	720	ND <150	1,3		
3/1/2001	83.43	8.18	8,500	78	330	200	680	ND <150	3		
6/4/2001	80.70	10.91	4,800	14	14	68	103.4	ND <0.5	2		
9/7/2001	77.41	14.20	---	---	---	---	---	---	---		
12/5/2001	84.83	6.78	9,000	24	52	210	454	ND <1.0	1		
3/13/2002	84.28	7.33	---	---	---	---	---	---	---		
6/5/2002	81.38	10.23	8,100	28	ND <140	69	147	ND <250	1,2		
	95.45		Monitoring well top of casings resurveyed 7/29/02								
9/3/2002	81.57	13.88	Insufficient water in the well to obtain a sample								
1/2/2003	88.50	6.95	23,000	390	2,700	810	4,000	ND <150			
3/3/2003	87.50	7.95	7,500	32	ND <180	62	415	ND <200			
6/2/2003	87.03	8.42	5,600	36	ND <110	86	180	ND <170	5, 6, 7		
9/11/2003	82.04	13.41	9,900	230	210	120	680	ND <270	5, 6		
12/1/2003	87.62	7.83	10,000	77	120	200	594	ND <400	5, 6		
3/3/2004	87.84	7.61	4,500	7.5	12	48	206	ND <1.0	5		
6/9/2004	85.06	10.39	4,800	ND <50	ND <100	55	89	ND <120	5, 6		
9/2/2004	81.77	13.68	4,500	59	58	73	199	ND <140	5, 6		
12/1/2004	87.06	8.39	7,500	120	340	180	554	ND <300	3, 4, 5		
3/1/2005	87.61	7.84	11,000	160	690	370	1,010	---	5		
6/1/2005	87.36	8.09	Not sampled								
6/1/2005 *	87.38	8.07	10,000	120	480	340	820	---	---		
9/1/2005	82.53	12.92	Not sampled								
9/1/2005 *	82.53	12.92	6,700	68	160	110	208	---	5		
12/1/2005	---	---	Inaccessible								
12/5/2005*	88.14	7.31	14,000	180	1,600	480	1,900	---	---		
MW-4											
12/1/2005	93.06	---	Dry	Insufficient water in the well to obtain a sample							
MW-5											
12/1/2005	92.81	89.00	3.81	1,400	27	12	42	24	ND <25		
MW-101*											
3/1/2001	91.89	84.30	7.59	ND <50	ND <0.5	ND <0.5	ND <0.5	ND <0.5	ND <3.0		
6/4/2001	82.19	9.70	ND <50	ND <0.5	ND <0.5	ND <0.5	ND <0.5	ND <0.5	ND <3.0		
9/4/2001	78.25	13.64	---	---	---	---	---	---	---		
12/3/2001	86.05	5.84	160	ND <0.5	ND <4.0	ND <0.5	ND <0.5	ND <3.0	1,2		
3/1/2002	84.71	7.18	ND <50	ND <0.5	ND <0.5	ND <0.5	ND <0.5	ND <3.0			
6/5/2002	82.76	9.13	ND <50	ND <0.5	ND <0.5	ND <0.5	ND <0.5	ND <3.0			
9/3/2002	95.70	82.04	13.66	ND <50	ND <0.5	ND <0.5	ND <0.5	ND <0.5	ND <3.0		
12/2/2002	82.54	13.16	64	ND <0.5	ND <2.8	ND <0.5	ND <0.5	ND <3.0			
3/3/2003	88.32	7.38	ND <50	ND <0.5	ND <2.8	ND <0.5	ND <0.5	ND <3.0			
6/2/2003	87.89	7.81	ND <50	ND <0.50	ND <0.50	ND <0.50	ND <0.50	ND <3.0			
9/11/2003	---	---	---	---	---	---	---	---	---		
12/1/2003	88.39	7.31	50	ND <0.50	ND <1.4	ND <0.50	ND <0.50	ND <0.50	2, 8, 9		
3/5/2004	89.10	6.60	ND <50	ND <0.50	ND <1.4	ND <0.50	ND <0.50	ND <0.50	---		
6/1/2004	87.76	7.94	ND <50	ND <0.50	ND <0.50	ND <0.50	ND <0.50	ND <0.50	---		
9/2/2004	82.30	13.40	90	ND <0.50	ND <3.0	ND <0.50	ND <0.50	ND <0.50	2, 8		
12/1/2004	87.74	7.96	No sample collected								
3/1/2005	87.90	7.80	ND <50	ND <0.50	ND <0.50	ND <0.50	ND <0.50	ND <0.50	12		
6/1/2005	87.69	8.01	ND <50	ND <0.50	ND <0.50	ND <0.50	ND <0.50	ND <0.50	---		
9/1/2005	--	DRY	No sample collected								
12/5/2005	88.65	7.05	ND <50	ND <0.50	ND <0.50	ND <0.50	ND <0.50	ND <0.50	---		

TABLE 2: MONITORING WELL DATA AND GROUNDWATER ANALYTICAL RESULTS

Blue Lake Market
 410 Railroad Avenue, Blue Lake, CA
 LOP No. 12229; LACO Project No. 3888.01

WELL/ Sample Date	Groundwater Measurements				Analytical Results					
	Well Head Elevation (feet msl)	Hydraulic Head (feet msl)	Depth to Water (feet)	TPHg	Benzene (ug/L)	Toluene (ug/L)	Ethylbenzene (ug/L)	Xylenes (ug/L)	MTBE (ug/L)	FOOT NOTES
MW-102*										
3/1/2001	91.19	83.27	7.92	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<3.0	
6/4/2001	89.76	10.43		ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<3.0	
9/4/2001	77.51	13.68		ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<3.0	
12/3/2001	84.36	6.83		ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<3.0	
3/1/2002	83.63	7.56		ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<3.0	
6/5/2002	81.32	9.87		ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<3.0	
				Monitoring well top of casings resurveyed 7/29/02						
9/3/2002	94.99	81.26	13.73	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<3.0	
12/2/2002	81.78	13.21		ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<3.0	
3/3/2003	87.37	7.62		ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<3.0	
6/2/2003	86.97	8.02		ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<3.0	
9/1/2003	---	---	---	---	---	---	---	---	---	
12/1/2003	87.34	7.65		ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	---	9
3/3/2004	87.76	7.23		ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	---	
6/1/2004	86.70	8.29		ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	---	
9/2/2004	81.56	13.43		ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	---	
12/1/2004	86.97	8.02		ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	---	
3/1/2005	87.33	7.66		ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	---	12
6/1/2005	87.19	7.80		ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	---	-
9/1/2005	82.12	12.87		ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	---	-
12/5/2005	87.76	7.23		ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	---	
MW-103*										
3/1/2001	91.57	83.36	8.21	2,900	27	37	35	63	ND<60	1,2
6/4/2001	80.86	10.71		3,200	42	ND>80	16	30.4	ND<30	1,2
9/4/2001	77.58	13.99		1,300	18	ND>40	8	5.4	ND<32	1,2
12/3/2001	84.58	6.99		5,700	150	160	95	219	ND<150	1,2
3/1/2002	83.68	7.89		5,700	100	178	83	380	ND<150	2
6/5/2002	81.36	10.21		3,900	25	ND<110	35	50	ND>80	1,2
	Monitoring well top of casings resurveyed 7/29/02									
9/3/2002	95.41	81.35	14.06	1,600	21	ND>35	11	7.0	ND<30	1,2
12/2/2002	81.91	13.50		5,700	280	110	190	336	ND<120	
3/3/2003	87.44	7.97		4,400	47	ND>200	74	229	---	
6/2/2003	87.03	8.38		2,400	14	ND>70	15	17.3	ND<30	3, 5, 6
9/11/2003	---	---	---	---	---	---	---	---	---	
12/1/2003	87.48	7.93		3,500	49	ND>90	48	58.6	---	8
3/3/2004	87.87	7.54		5,800	100	160	130	343	---	
6/1/2004	86.81	8.60		2,100	15	ND<110	32	40	---	
9/2/2004	81.68	13.73		1,800	36	18	24	24.8	---	5
12/1/2004	87.09	8.32		2,400	42	40	41	47.4	---	5
3/1/2005	87.50	7.91		3,700	58	82	67	125	---	5
6/1/2005	87.32	8.09		2,700	33	47	46	79	---	-
9/1/2005	82.29	13.12		7,400	130	110	230	446	---	5
12/5/2005	87.97	7.44		3,900	70	81	87	156	---	
MW-104*										
6/4/2001	91.48	81.54	9.94	17,000	260	320	40	1,510	ND<300	2
9/4/2001	77.81	13.67		9,800	120	ND<200	330	546	ND<400	2
12/3/2001	85.33	6.15		33,000	870	520	1,600	4,650	ND<900	1,2
3/1/2002	84.13	7.35		20,000	400	450	930	2,480	ND<650	2
6/5/2002	82.08	9.40		21,000	370	880	890	2,610	ND<600	2
	Monitoring well top of casings resurveyed 7/29/02									
9/3/2002	95.32	81.52	13.80	7,400	100	ND<200	270	361	ND<150	1,2
12/2/2002	82.31	13.01		13,800	260	210	630	1,191	ND<320	
3/3/2003	87.81	7.51		20,000	430	560	950	2,330	---	
6/2/2003	87.39	7.93		26,000	540	1,100	1,300	3,630	ND<600	6
9/11/2003	---	---	---	---	---	---	---	---	---	
12/1/2003	87.96	7.36		25,000	760	520	1,300	2,700	---	5
3/3/2004	88.56	6.76		21,000	400	460	1,000	2,010	---	
6/1/2004	87.27	8.05		26,000	500	680	1,200	2,420	---	
9/2/2004	82.03	13.29		3,700	55	49	140	168	---	5
12/1/2004	87.31	8.01		16,000	430	480	990	2,090	---	4, 5
3/1/2005	87.81	7.51		17,000	200	350	590	1,280	---	5
6/1/2005	87.60	7.72		13,000	130	230	498	1,010	---	-
9/1/2005	82.64	12.68		8,300	63	88	270	519	---	5
12/5/2005	88.53	6.79		10,000	59	100	580	553	---	

TABLE 2: MONITORING WELL DATA AND GROUNDWATER ANALYTICAL RESULTS

Blue Lake Market
410 Railroad Avenue, Blue Lake, CA
LOP No. 12229; LACO Project No. 3888.01

Groundwater Measurements				Analytical Results						
WELL/ Sample Date	Well Head Elevation (feet msl)	Hydraulic Head (feet msl)	Depth to Water (feet)	TPHg (ug/L)	Benzene (ug/L)	Toluene (ug/L)	Ethylbenzene (ug/L)	Xylenes (ug/L)	MTBE (ug/L)	FOOT NOTES
MW-105*										
6/4/2001	91.32	80.57	10.57	430	ND<0.5	ND<7.0	ND<1.2	ND<0.5	ND<3.0	1,2
9/4/2001	77.47	13.85	650	ND<4.0	ND<9.0	ND<1.5	ND<1.2	ND<13	1,2	
12/3/2001	84.48	6.84	4,700	11	ND<49	18	9	ND<100	1,2,4	
3/1/2002	83.63	7.69	260	1.7	ND<6.0	ND<0.50	ND<0.50	ND<6.0	1,2	
6/5/2002	81.31	10.01	140	ND<0.50	ND<3.0	ND<0.50	ND<0.50	ND<3.0	1,2	
				Monitoring well top of casings resurveyed 7/29/02						
9/3/2002	95.15	81.24	13.91	360	ND<0.50	ND<10	ND<1.0	ND<1.0	ND<3.0	1,2
12/2/2002	81.76	13.39	680	6.8	ND<11	2.1	0.82	ND<13		
3/3/2003	87.40	7.75	280	ND<1.5	ND<5.5	ND<1.0	ND<1.0	---	---	
6/2/2003	86.98	8.17	210	ND<0.50	ND<5.5	ND<0.50	ND<0.50	ND<3.0	2, 5	
9/1/2003	---	---	---	---	---	---	---	---	---	
12/1/2003	87.39	7.76	1,500	ND<5.0	ND<40	3.8	1.60	---	2, 8	
3/3/2004	87.80	7.35	390	ND<2.0	ND<17	0.93	0.53	---	---	
6/1/2004	86.71	8.44	210	ND<0.50	ND<0.50	ND<0.50	ND<0.50	---	---	
9/2/2004	81.54	13.61	210	ND<0.50	ND<9.0	ND<0.50	ND<0.50	---	2, 8	
12/1/2004	87.00	8.15	590	ND<2.0	ND<18	1.3	0.73	---	2, 6, 8	
3/1/2005	87.39	7.76	680	ND<2.5	ND<30	ND<2.0	ND<1.5	---	2, 6, 8	
6/1/2005	87.21	7.94	510	1.7	9.8	0.50	0.57	---	-	
9/1/2005	82.10	13.05	470	8.2	ND<15	3.6	2.15	---	6,11	
12/5/2005	87.84	7.31	2,600	7.2	ND<70	8.3	4.6	---	---	
MW-106*										
3/1/2001	88.88	82.97	5.91	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<3.0	
6/4/2001	80.43	8.45	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<1.0		
9/4/2001	76.96	11.92	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<3.0		
12/3/2001	83.92	4.96	ND<50	ND<0.5	ND<1.5	ND<0.5	ND<0.5	ND<1.0	2	
3/1/2002	83.29	5.59	ND<50	0.74	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<3.0	
6/5/2002	80.97	7.91	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<3.0	
				Monitoring well top of casings resurveyed 7/29/02						
9/3/2002	92.70	80.71	11.99	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<3.0	
12/2/2002	81.27	11.43	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<3.0	
3/3/2003	87.06	5.64	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<3.0	
6/2/2003	86.66	6.04	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<3.0	
9/1/2003	---	---	---	---	---	---	---	---	---	
12/1/2003	86.99	5.71	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	---	9
3/3/2004	87.46	5.24	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	---	
6/1/2004	86.43	6.27	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	---	
9/2/2004	81.05	11.65	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	---	
12/1/2004	86.72	5.98	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	---	
3/1/2005	87.08	5.62	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	---	12
6/1/2005	86.91	5.79	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	---	-
9/1/2005	81.67	11.03	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	---	-
12/5/2005	87.56	5.14	110	4.4	3.7	1.6	1.1	---	---	

Reference NAVD 88. Elevations established 7/29/02 by R. Smith, LS using Caltrans HPGN monument "D CA 61 RB" North Arcata at Giantoli & Hwy 101

* Hydraulic head data and laboratory analytical results are provided by SHN.

Attachment 1

**CONSULTING ENGINEERS & GEOLOGISTS, INC.**

812 W. Wabash • Eureka, CA 95501-2138 • Tel: 707/441-8855 • FAX: 707/441-8877 • E-mail: shninfo@shn-engr.com

Fax Cover Sheet

Reference: 097309-Blue Lake Bedrock & Leather
Date: 1- 06
To: Gwendlyn Erickson
Company: LACO
Fax #: 707-443-0553
From: AKON MELODY
SHN Consulting Engineers & Geologists, Inc.
Fax #: 707/441-8877
Subject: 4th Qtr 2005 GWM field sheets + lab data sheets
No. Pages Total: 22

Gwendlyn,

Here are our data sheets & lab results for
4th Qtr 2005. Please send over LACO's sheets &
lab data as well. Thanks.

An

Happy New Year.

The contents of this document may be sensitive. If you have received this fax by mistake, if you have any questions, or if you did not receive all pages of the fax, please telephone 707/441-8855.

Civil • Environmental • Geotechnical • Surveying
Construction Monitoring • Botanical & Wetlands Surveys
• Materials Testing • Economic Development



CONSULTING ENGINEERS & GEOLOGISTS, INC.

480 Hemsted Drive • Redding, CA 96002 • Tel: 530.221.5424 • FAX: 530.221.0135 • E-mail: shninfo@shn-redding.com
812 W. Wabash • Eureka, CA 95501 • Tel: 707.441.8855 • FAX: 707.441.8877 • E-mail: shninfo@shn-engr.com

DAILY FIELD REPORT

JOB NO	097 309
Page 1 of 1	

DAILY FIELD REPORT SEQUENCE NO

DATE	12.5.05	DAY OF WEEK	MOR
------	---------	-------------	-----

PROJECT ENGINEER/ SUPERVISOR	Mike Foget
------------------------------	------------

TECHNICIAN	David R. Perez A. Melody
------------	-----------------------------

DESCRIBE EQUIPMENT USED FOR HAULING, SPREADING, WATERING, CONDITIONING & COMPACTING

- 1/540
- 930 Arrived at Site, opened all wells, started taking DO + Water Level readings.
 1115 Began purging MW-10k with a disposable bailer, all purge water was caught in a graduated 5-gal bucket.
 1155 Sampled MW-10k with it's bailer.
 1200 Began purging MW-10l with a disposable bailer, all purge water was caught in 5-gal bucket.
 1230 Sampled MW-10l
 1238 Began purging MW-102 with a disposable bailer, all purge water was caught in 5-gal bucket.
 1305 Sampled MW-10h with it's disposable bailer.
 1311 Began purging MW-105 with a disposable bailer, All purge water was caught in 5-gal bucket.
 1335 Sampled MW-105 with it's bailer.
 1345 Began purging MW-103 with a disposable bailer, All purge water was caught in 5-gal bucket.
 1415 Sampled MW-103 with it's bailer.
 1425 Began purging M-3 with a disposable bailer, all purge water was caught in 5-gal bucket.
 1450 Sampled M-3 with its bailer.
 1500 Began purging MW-104 with a disposable bailer, All purge water was caught in 5-gal bucket.
 1525 Sampled MW-104 with it's bailer.
 1530 All well lids + caps locked + closed.
 1540 OFF SITE TO NCL.

Note: All decon + purge water was transferred to 2 50-gal plastic drums, and transported to SHN's 1,000 gal. PHST located @ 812 W. Wabash Ave., Eureka, CA.
 (03 gallons total.)



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Groundwater Elevations

Job No.: 097309

Name: A. Melody

Client: CHARLES HUNTZINGER

Date: 12/5/05

Location: BLUE LAKE, CA

Weather: clear



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EQUIPMENT CALIBRATION SHEET

Name: A. MelodyProject Name: Blue Lake Beltline & Leather WorksReference No.: 097309Date: 12.5.05

Equipment:

 pH & EC PID GTCO₂ GTLEL Turbidity OtherDO meter YSI 95

Description of Calibration Procedure and Results:

pH & EC meter calibrated using a 2 buffer method with
7.01 & 4.01, the EC set at 1413 µS

DO meter is self calibrating with altitude set at
1,



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Water Sampling Data Sheet

Project Name:	<u>Blue Lake Betting and Leather</u>	Date/Time:	<u>12.5.05</u>
Project No.:	<u>097309</u>	Sampler Name:	<u>David R. Price A. Melady</u>
Location:	<u>Blue Lake, CA</u>	Sample Type:	<u>Ground water</u>
Well #:	<u>MW-106</u>	Weather	<u>Clear</u>
Hydrocarbon Thickness/Depth (feet):	<u>NA</u>	Key Needed:	<u>YES</u> <u>Dolphin</u>

$$\begin{array}{l} \text{Total Well Depth} \quad \text{Initial Depth to} \\ (\text{feet}) \quad \text{Water (feet)} \end{array} = \begin{array}{l} \text{Height of Water} \\ \text{Column (feet)} \end{array} \times \begin{array}{l} 0.163 \text{ gal/ft (2-inch well) /} \\ 0.653 \text{ gal/ft (4-inch well) } \end{array} = \begin{array}{l} 1 \text{ Casing Volume} \\ (\text{gal}) \end{array}$$

$$\boxed{15.00} - \boxed{5.14} = \boxed{9.86} \times \boxed{0.163} = \boxed{1.60 \times 7 = 4.80}$$

Time	DO (ppm)	CO ₂ (ppm)	ORP (mV)	EC (uS/cm)	Temp (°F)	pH	Water Removed (gal)	Comments
1038	<u>2.32</u>	—	—	—	—	—	0 gal.	Clear
1125	+	30	205	—	—	—	0.25 gal.	..
1132	↓			151	56.5	5.88	1.75 gal.	..
1142	No Flow			147	56.8	5.97	3.25 gal.	..
1145	thin silt			147	56.7	5.98	5.0 gal.	..
1155	Sample Time							

Purge Method: Hand bailTotal Volume Removed: 5.0 (gal)

Laboratory Information

Sample ID	# & Type of Containers	Preservative / Type	Laboratory	Analyses
MW-106	3 - 40mL vials	YES / HCl	NCL	TPHG / BTEX

Well Condition: Good

Remarks:

Recharged to 5.22' at sampling time (1155)



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Water Sampling Data Sheet

Project Name:	<u>Blue Lake Betting and Leather</u>	Date/Time:	<u>12-5-05</u>
Project No.:	<u>C97309</u>	Sampler Name:	<u>David R. Painz A. Melody</u>
Location:	<u>Blue Lake, CA</u>	Sample Type:	<u>Ground water</u>
Well #:	<u>MW-101</u>	Weather	<u>clear</u>
Hydrocarbon Thickness/Depth (feet):	<u>NA</u>	Key Needed:	<u>YES</u> <u>Dolphin</u>

$$\begin{array}{lclclclcl} \text{Total Well Depth} & - & \text{Initial Depth to} & = & \text{Height of Water} & \times & 0.163 \text{ gal/ft (2-inch well)} / \\ (\text{feet}) & & \text{Water (feet)} & & \text{Column (feet)} & & 0.653 \text{ gal/ft (4-inch well)} & = & 1 \text{ Casing Volume} \\ \boxed{103.613.00} & - & \boxed{7.05} & = & \boxed{5.95} & \times & \boxed{0.163} & = & \boxed{0.97 \times 3 = 2.91} \\ (\text{gal}) & & & & & & & & (\text{gal}) \end{array}$$

Time	DO (ppm)	CO ₂ (ppm)	ORP (mV)	EC (uS/cm)	Temp (°F)	pH	Water Removed (gal)	Comments
1045 (7.81)	—	—	—	—	—	—	0 gal	
1211 ↓	20	264	—	—	—	—	0.25 gal	
1215 ↓			149	59.2	6.12	1.0 gal		
1218 No Flow			137	59.6	6.08	2.0 gal		
1224 thin silt			145	59.1	6.12	3.0 gal		
1230	Samples Taken							

Purge Method: Hand bailTotal Volume Removed: 3.0 (gal)

Laboratory Information

Sample ID	# & Type of Containers	Preservative / Type	Laboratory	Analyses
MW-101	3 - 40ml vials	YES / HCl	NCL	TPHG / BTEX

Well Condition: Good

Remarks:

Recharged to 7.02' at sampling time (1230)



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Water Sampling Data Sheet

Project Name:	<u>Blue Lake Bedding and Leaching</u>	Date/Time:	<u>13-5-05</u>
Project No.:	<u>C97309</u>	Sampler Name:	<u>David P. Paris A. McElroy</u>
Location:	<u>Blue Lake, CA</u>	Sample Type:	<u>Ground water</u>
Well #:	<u>MW-102</u>	Weather:	<u>Clear</u>
Hydrocarbon Thickness/Depth (feet):	<u>NA</u>	Key Needed:	<u>YES</u> <u>Dolphin</u>

$$\text{Total Well Depth (feet)} - \text{Initial Depth to Water (feet)} = \text{Height of Water Column (feet)} \times 0.163 \text{ gal/ft (2-inch well) / } 0.653 \text{ gal/ft (4-inch well)} = 1 \text{ Casing Volume (gal)}$$

$$\boxed{19.50} - \boxed{7.23} = \boxed{12.27} \times \boxed{0.163} = \boxed{2.0 \times 3 = 6.0}$$

Time	DO (ppm)	CO ₂ (ppm)	ORP (mV)	EC (uS/cm)	Temp (°F)	pH	Water Removed (gal)	Comments
10:55 (3.59)	—	—	—	—	—	—	0 gal.	
12:38	15	228	—	—	—	—	0.25 gal.	Clear
12:43	↓	—	—	123	57.5	6.08	1.0 gal.	↑
12:48	No Flow	—	—	123	57.7	6.08	4.0 gal.	↑
12:55	thin silt	—	—	123	52.7	6.08	6.0 gal.	↑
13:05	Sampling Time	—	—	—	—	—		

Purge Method: Hand bailTotal Volume Removed: 6.0 (gal)

Laboratory Information

Sample ID	# & Type of Containers	Preservative / Type	Laboratory	Analyses
MW-102	3 - 4cm Vials	YES / HCL	NCL	TPHG / BTEX

Well Condition: Good

Remarks:

Recharged to 7.24' ± sampling time (13:08)



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Water Sampling Data Sheet

Project Name:	<u>Blue Lake Boring and Leaching</u>	Date/Time:	<u>12.5.05</u>
Project No.:	<u>097309</u>	Sampler Name:	<u>David R. Paine A. Melody</u>
Location:	<u>Blue Lake, CA</u>	Sample Type:	<u>Ground water</u>
Well #:	<u>MW-105</u>	Weather:	<u>clear</u>
Hydrocarbon Thickness/Depth (feet):	<u>NA</u>	Key Needed:	<u>YES</u> <u>Dolphin</u>

$$\text{Total Well Depth} \quad \text{Initial Depth to Water (feet)} = \text{Height of Water Column (feet)} \times \frac{0.163 \text{ gal/ft (2-inch well)}}{0.653 \text{ gal/ft (4-inch well)}} = 1 \text{ Casing Volume (gal)}$$

$$\boxed{15.10} - \boxed{7.31} = \boxed{7.79} \times \boxed{0.163} = \boxed{1.27 \times 3 = 3.80}$$

Time	DO (ppm)	CO ₂ (ppm)	ORP (mV)	EC (uS/cm)	Temp (°F)	pH	Water Removed (gal)	Comments
1307 (1.61)	—	—	—	—	—	—	0 gal.	
1311	80	274	—	—	—	—	0.25 gal.	
1317 ↓				302	59.2	6.13	1.50 gal.	
1320 No Flow				303	59.4	6.13	2.75 gal.	
1325 than cill				296	59.5	6.13	4.0 gal.	
1335 Sample Time								

Purge Method: Hand bailTotal Volume Removed: 4.0 (gal)

Laboratory Information

Sample ID	# & Type of Containers	Preservative / Type	Laboratory	Analyses
MW-105	3 ~ 40ml vols	YES / HCl	NCL	TPHG / BTEX

Well Condition: Good

Remarks:

Recharged to 7.33' ± sampling time (1335)



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Water Sampling Data Sheet

Project Name:	<u>Blue Lake Beating and Leather</u>	Date/Time:	<u>12-5-05</u>
Project No.:	<u>097309</u>	Sampler Name:	<u>David R. Bain A. Melody</u>
Location:	<u>Blue Lake, CA</u>	Sample Type:	<u>Ground water</u>
Well #:	<u>MW - 103</u>	Weather	<u>clear</u>
Hydrocarbon Thickness/Depth (feet):	<u>NA</u>	Key Needed:	<u>YES</u> <u>Dolphin</u>

$$\begin{array}{l} \text{Total Well Depth} \quad \text{Initial Depth to} \\ (\text{feet}) \quad \text{Water (feet)} \end{array} = \begin{array}{l} \text{Height of Water} \\ \text{Column (feet)} \end{array} \times \begin{array}{l} 0.163 \text{ gal/ft (2-inch well)} / \\ 0.653 \text{ gal/ft (4-inch well)} \end{array} = \begin{array}{l} 1 \text{ Casing Volume} \\ (\text{gal}) \end{array}$$

<u>18.65</u>	<u>7.44</u>	<u>=</u>	<u>11.21</u>	<u>x</u>	<u>0.653</u>	<u>=</u>	<u>7.32 \times 3 = 21.97</u>
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Time	DO (ppm)	CO ₂ (ppm)	ORP (mV)	EC (uS/cm)	Temp (°F)	pH	Water Removed (gal)	Comments
1102 (2.25)	—	—	—	—	—	—	0 gal.	
1345	40	224	—	—	—	—	0.25 gal.	
1352	↓			165	60.3	6.12	7.50 gal.	
1400 No Flow				160	60.6	6.11	15.0 gal.	
1404 than sill				160	60.3	6.08	22.0 gal.	
1415	Samples Taken							

Purge Method: Hand bailTotal Volume Removed: 22.0 (gal)

Laboratory Information

Sample ID	# & Type of Containers	Preservative / Type	Laboratory	Analyses
MW - 103	3 - 40ml vials	YES / HCl	NCL	TPHG / BTEX

Well Condition: Good

Remarks:

Pearlsized to 7.44' at sampling time (1415)



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Water Sampling Data Sheet

Project Name:	<u>Blue Lake Belting and Leather</u>	Date/Time:	<u>12.5.05</u>
Project No.:	<u>097309</u>	Sampler Name:	<u>David R. Payne A. Melo</u>
Location:	<u>Blue Lake, CA</u>	Sample Type:	<u>Ground water</u>
Well #:	<u>MW - 3</u>	Weather	<u>Clear</u>
Hydrocarbon Thickness/Depth (feet):	<u>NA</u>	Key Needed:	<u>yes</u> <u>Dolphin</u>

$$\begin{array}{l} \text{Total Well Depth} \quad \text{Initial Depth to} \\ (\text{feet}) \quad \text{Water (feet)} \quad = \quad \text{Height of Water} \\ \boxed{14.70} \quad - \quad \boxed{7.31} \quad = \quad \boxed{7.39} \end{array} \times \begin{array}{l} 0.163 \text{ gal/ft (2-inch well) /} \\ 0.653 \text{ gal/ft (4-inch well)} \end{array} = \begin{array}{l} 1 \text{ Casing Volume} \\ (\text{gal}) \\ \boxed{1.20 \times 3 = 3.60} \end{array}$$

Time	DO (ppm)	CO ₂ (ppm)	ORP (mV)	EC (uS/cm)	Temp (°F)	pH	Water Removed (gal)	Comments
1107	<u>1.75</u>	—	—	—	—	—	0 gal.	
1425	<u>30</u>	<u>259</u>	—	—	—	—	0.45 gal.	
1437	—	—	—	131	60.5	6.15	1.25 gal.	
1442	No Flow	—	—	134	60.9	6.16	2.50 gal.	
1447	Thru cell	—	—	135	60.8	6.14	3.75 gal.	
1450	Sample Time	—	—	—	—	—	—	

Purge Method: Hand BailTotal Volume Removed: 3.75 (gal)

Laboratory Information

Sample ID	# & Type of Containers	Preservative / Type	Laboratory	Analyses
MW-3	3 - 40ml vials	yes HCL	NCL	TPHG/BTEX

Well Condition: Good

Remarks:

Recharged to 7.41' at sample time (1450)



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Water Sampling Data Sheet

Project Name:	<u>Blue Lake Belling and Leather</u>	Date/Time:	<u>12-5-05</u>
Project No.:	<u>097309</u>	Sampler Name:	<u>David R. Fair A. Melchor</u>
Location:	<u>Blue Lake, CA</u>	Sample Type:	<u>Ground water</u>
Well #:	<u>MW-104</u>	Weather:	<u>Clean</u>
Hydrocarbon Thickness/Depth (feet):	<u>NH</u>	Key Needed:	<u>YES</u> <u>Dolphin</u>

$$\begin{array}{l} \text{Total Well Depth} \quad \text{Initial Depth to} \\ (\text{feet}) \quad \text{Water (feet)} \quad = \quad \text{Height of Water} \\ \boxed{16.55} \quad - \quad \boxed{6.79} \quad = \quad \boxed{9.76} \quad \times \quad \begin{array}{l} 0.163 \text{ gal/ft (2-inch well) /} \\ 0.653 \text{ gal/ft (4-inch well) } \end{array} \quad = \quad \begin{array}{l} 1 \text{ Casing Volume} \\ (\text{gal}) \end{array} \\ \boxed{6.37} \times 3 = \boxed{19.11} \end{array}$$

Time	DO (ppm)	CO ₂ (ppm)	ORP (mV)	EC (uS/cm)	Temp (°F)	pH	Water Removed (gal)	Comments
1108	<u>3.54</u>	—	—	—	—	—	0 gal.	
1500		10	270	—	—	—	0.25 gal.	
1507	↓			121	64.4	6.36	6.50 gal.	
1513	No Flow			121	64.5	6.26	12.75 gal.	
1518	thru cell			119	64.5	6.27	19.25 gal.	
1525	Sampling Time							

Purge Method: Hand bailTotal Volume Removed: 19.25 (gal)

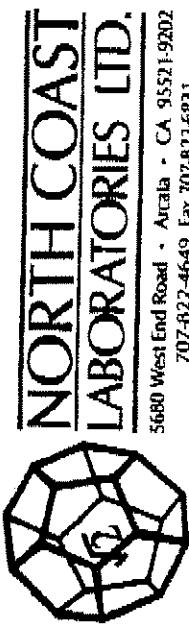
Laboratory Information

Sample ID	# & Type of Containers	Preservative / Type	Laboratory	Analyses
MW-104	3 ~ 4cm VCD's	YES / HCL	NCL	TPHG / BTEX

Well Condition: Good

Remarks:

Recharged to 8.01' + sampling Time - (525)



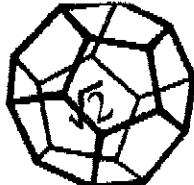
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Chain of Custody

Attention:	SHN
Results & Invoice to:	
Address:	812 West Wabash Avenue Eureka, CA 95501
Phone:	441-8855
Copies of Report to:	
Sampler (Sign & Print):	
Project Number:	
Project Name:	
Purchase Order Number:	

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100	101	102	103	104	105	106	107	108	109	110	111	112	113	114	115	116	117	118	119	120	121	122	123	124	125	126	127	128	129	130	131	132	133	134	135	136	137	138	139	140	141	142	143	144	145	146	147	148	149	150	151	152	153	154	155	156	157	158	159	160	161	162	163	164	165	166	167	168	169	170	171	172	173	174	175	176	177	178	179	180	181	182	183	184	185	186	187	188	189	190	191	192	193	194	195	196	197	198	199	200	201	202	203	204	205	206	207	208	209	210	211	212	213	214	215	216	217	218	219	220	221	222	223	224	225	226	227	228	229	230	231	232	233	234	235	236	237	238	239	240	241	242	243	244	245	246	247	248	249	250	251	252	253	254	255	256	257	258	259	260	261	262	263	264	265	266	267	268	269	270	271	272	273	274	275	276	277	278	279	280	281	282	283	284	285	286	287	288	289	290	291	292	293	294	295	296	297	298	299	300	301	302	303	304	305	306	307	308	309	310	311	312	313	314	315	316	317	318	319	320	321	322	323	324	325	326	327	328	329	330	331	332	333	334	335	336	337	338	339	340	341	342	343	344	345	346	347	348	349	350	351	352	353	354	355	356	357	358	359	360	361	362	363	364	365	366	367	368	369	370	371	372	373	374	375	376	377	378	379	380	381	382	383	384	385	386	387	388	389	390	391	392	393	394	395	396	397	398	399	400	401	402	403	404	405	406	407	408	409	410	411	412	413	414	415	416	417	418	419	420	421	422	423	424	425	426	427	428	429	430	431	432	433	434	435	436	437	438	439	440	441	442	443	444	445	446	447	448	449	450	451	452	453	454	455	456	457	458	459	460	461	462	463	464	465	466	467	468	469	470	471	472	473	474	475	476	477	478	479	480	481	482	483	484	485	486	487	488	489	490	491	492	493	494	495	496	497	498	499	500	501	502	503	504	505	506	507	508	509	510	511	512	513	514	515	516	517	518	519	520	521	522	523	524	525	526	527	528	529	530	531	532	533	534	535	536	537	538	539	540	541	542	543	544	545	546	547	548	549	550	551	552	553	554	555	556	557	558	559	550	551	552	553	554	555	556	557	558	559	560	561	562	563	564	565	566	567	568	569	570	571	572	573	574	575	576	577	578	579	580	581	582	583	584	585	586	587	588	589	590	591	592	593	594	595	596	597	598	599	600	601	602	603	604	605	606	607	608	609	610	611	612	613	614	615	616	617	618	619	620	621	622	623	624	625	626	627	628	629	630	631	632	633	634	635	636	637	638	639	640	641	642	643	644	645	646	647	648	649	650	651	652	653	654	655	656	657	658	659	660	661	662	663	664	665	666	667	668	669	660	661	662	663	664	665	666	667	668	669	670	671	672	673	674	675	676	677	678	679	680	681	682	683	684	685	686	687	688	689	690	691	692	693	694	695	696	697	698	699	690	691	692	693	694	695	696	697	698	699	700	701	702	703	704	705	706	707	708	709	710	711	712	713	714	715	716	717	718	719	720	721	722	723	724	725	726	727	728	729	730	731	732	733	734	735	736	737	738	739	740	741	742	743	744	745	746	747	748	749	750	751	752	753	754	755	756	757	758	759	760	761	762	763	764	765	766	767	768	769	770	771	772	773	774	775	776	777	778	779	770	771	772	773	774	775	776	777	778	779	780	781	782	783	784	785	786	787	788	789	790	791	792	793	794	795	796	797	798	799	790	791	792	793	794	795	796	797	798	799	800	801	802	803	804	805	806	807	808	809	810	811	812	813	814	815	816	817	818	819	810	811	812	813	814	815	816	817	818	819	820	821	822	823	824	825	826	827	828	829	830	831	832	833	834	835	836	837	838	839	840	841	842	843	844	845	846	847	848	849	850	851	852	853	854	855	856	857	858	859	860	861	862	863	864	865	866	867	868	869	870	871	872	873	874	875	876	877	878	879	880	881	882	883	884	885	886	887	888	889	890	891	892	893	894	895	896	897	898	899	890	891	892	893	894	895	896	897	898	899	900	901	902	903	904	905	906	907	908	909	910	911	912	913	914	915	916	917	918	919	910	911	912	913	914	915	916	917	918	919	920	921	922	923	924	925	926	927	928	929	930	931	932	933	934	935	936	937	938	939	940	941	942	943	944	945	946	947	948	949	950	951	952	953	954	955	956	957	958	959	960	961	962	963	964	965	966	967	968	969	970	971	972	973	974	975	976	977	978	979	980	981	982	983	984	985	986	987	988	989	990	991	992	993	994	995	996	997	998	999	990	991	992	993	994	995	996	997	998	999	1000	1001	1002	1003	1004	1005	1006	1007	1008	1009	10010	10011	10012	10013	10014	10015	10016	10017	10018	10019	10020	10021	10022	10023	10024	10025	10026	10027	10028	10029	10030	10031	10032	10033	10034	10035	10036	10037	10038	10039	10040	10041	10042	10043	10044	10045	10046	10047	10048	10049	10050	10051	10052	10053	10054	10055	10056	10057	10058	10059	10060	10061	10062	10063	10064	10065	10066	10067	10068	10069	10070	10071	10072	10073	10074	10075	10076	10077	10078	10079	10080	10081	10082	10083	10084	10085	10086	10087	10088	10089	10090	10091	10092	10093	10094	10095	10096	10097	10098	10099	100100	100101	100102	100103	100104	100105	100106	100107	100108	100109	100110	100111	100112	100113	100114	100115	100116	100117	100118	100119	100120	100121	100122	1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**NORTH COAST
LABORATORIES LTD.**

December 19, 2005

SHN Consulting Engineers and Geologists
812 West Wabash Avenue
Eureka, CA 95501

Order No.: 0512138
Invoice No.: 55068
PO No.:
ELAP No. 1247-Expires July 2006

Attn: Mike Foget

RE: 097309, Blue Lake Belting and Leather

SAMPLE IDENTIFICATION

Fraction	Client Sample Description
01A	MW-106
02A	MW-101
03A	MW-102
04A	MW-105
05A	MW-103
06A	MW-104
07A	M-3

ND = Not Detected at the Reporting Limit

Limit = Reporting Limit

All solid results are expressed on a wet-weight basis unless otherwise noted.

REPORT CERTIFIED BY

Laboratory Supervisor(s)

QA Unit

Jesse G. Chaney, Jr.
Laboratory Director

North Coast Laboratories, Ltd.

Date: 19-Dec-05

CLIENT: SHN Consulting Engineers and Geologists
Project: 097309, Blue Lake Belting and Leather
Lab Order: 0512138

CASE NARRATIVE**TPH as Gasoline:**

Samples MW-106, MW-103, MW-104 and M-3 appear to be similar to gasoline but certain peak ratios are not that of a fresh gasoline standard. The reported results represent the amount of material in the gasoline range.

The gasoline value for sample MW-105 includes the reported gasoline components in addition to other peaks in the gasoline range.

BTEX:

Some reporting limits were raised for sample MW-105 due to matrix interference.

Sample MW-105 was diluted and the reporting limits raised additionally due to matrix interference.

The surrogate recovery for sample MW-103 was outside of the acceptance limits. The surrogate recoveries for the quality control samples were within the acceptance limits. This indicates that the high surrogate recovery may be due to matrix effects from the sample.

Date: 19-Dec-05
 WorkOrder: 0512138

ANALYTICAL REPORT

Client Sample ID: MW-106
 Lab ID: 0512138-01A

Received: 12/5/05

Collected: 12/5/05 11:55

Test Name:	Reference: EPA 5030/EPA 8021B					
Parameter	Result	Limit	Units	DF	Extracted	Analyzed
Benzene	4.4	0.50	µg/L	1.0		12/15/05
Toluene	9.7	0.50	µg/L	1.0		12/15/05
Ethylbenzene	1.6	0.50	µg/L	1.0		12/16/05
m,p-Xylene	1.1	0.50	µg/L	1.0		12/15/05
o-Xylene	ND	0.50	µg/L	1.0		12/15/05
Surrogate: Cis-1,2-Dichloroethylene	89.0	85-115	% Rec	1.0		12/15/05

Test Name: TPH as Gasoline

Reference: EPA 5030/GCFID(LUFT)/EPA 8015B

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
TPH Gas (C6-C14)	110	50	µg/L	1.0		12/15/05

Client Sample ID: MW-101

Received: 12/5/05

Collected: 12/5/05 12:30

Lab ID: 0512138-02A

Test Name:	Reference: EPA 5030/EPA 8021B					
Parameter	Result	Limit	Units	DF	Extracted	Analyzed
Benzene	ND	0.50	µg/L	1.0		12/15/05
Toluene	ND	0.50	µg/L	1.0		12/15/05
Ethylbenzene	ND	0.50	µg/L	1.0		12/15/05
m,p-Xylene	ND	0.50	µg/L	1.0		12/15/05
o-Xylene	ND	0.50	µg/L	1.0		12/15/05
Surrogate: Cis-1,2-Dichloroethylene	89.3	85-115	% Rec	1.0		12/15/05

Test Name: TPH as Gasoline

Reference: EPA 5030/GCFID(LUFT)/EPA 8015B

Parameter	Result	Limit	Units	DF	Extracted	Analyzed
TPH Gas (C6-C14)	ND	50	µg/L	1.0		12/15/05

Date: 19-Dec-05
 WorkOrder: 0512138

ANALYTICAL REPORT

Client Sample ID: MW-102
 Lab ID: 0512138-03A

Received: 12/5/05

Collected: 12/5/05 13:05

Test Name: BTEX

Reference: EPA 5030/EPA 8021B

<u>Parameter</u>	<u>Result</u>	<u>Limit</u>	<u>Units</u>	<u>DF</u>	<u>Extracted</u>	<u>Analyzed</u>
Benzene	ND	0.50	µg/L	1.0		12/15/05
Toluene	ND	0.50	µg/L	1.0		12/15/05
Ethylbenzene	ND	0.50	µg/L	1.0		12/15/05
m,p-Xylene	ND	0.50	µg/L	1.0		12/15/05
o-Xylene	ND	0.50	µg/L	1.0		12/15/05
Surrogate: Cis-1,2-Dichloroethylene	86.2	85-115	% Rec	1.0		12/15/05

Test Name: TPH as Gasoline

Reference: EPA 5030/GCFID(LUFT)/EPA 8015B

<u>Parameter</u>	<u>Result</u>	<u>Limit</u>	<u>Units</u>	<u>DF</u>	<u>Extracted</u>	<u>Analyzed</u>
TPHC Gas (C6-C14)	ND	50	µg/L	1.0		12/15/05

Client Sample ID: MW-105
 Lab ID: 0512138-04A

Received: 12/5/05

Collected: 12/5/05 13:35

Test Name: BTEX

Reference: EPA 5030/EPA 8021B

<u>Parameter</u>	<u>Result</u>	<u>Limit</u>	<u>Units</u>	<u>DF</u>	<u>Extracted</u>	<u>Analyzed</u>
Benzene	7.2	5.0	µg/L	10		12/15/05
Toluene	ND	70	µg/L	10		12/15/05
Ethylbenzene	8.3	0.50	µg/L	1.0		12/15/05
m,p-Xylene	4.6	0.50	µg/L	1.0		12/15/05
o-Xylene	ND	3.5	µg/L	1.0		12/15/05
Surrogate: Cis-1,2-Dichloroethylene	98.9	85-115	% Rec	10		12/15/05

Test Name: TPH as Gasoline

Reference: EPA 5030/GCFID(LUFT)/EPA 8015B

<u>Parameter</u>	<u>Result</u>	<u>Limit</u>	<u>Units</u>	<u>DF</u>	<u>Extracted</u>	<u>Analyzed</u>
TPHC Gas (C6-C14)	2,600	500	µg/L	10		12/15/05

Date: 19-Dec-05
 WorkOrder: 0512138

ANALYTICAL REPORT

Client Sample ID: MW-103
Lab ID: 0512138-05A

Received: 12/5/05

Collected: 12/5/05 14:15

Test Name: BTEX

Reference: EPA 5030/EPA 8021B

<u>Parameter</u>	<u>Result</u>	<u>Limit</u>	<u>Units</u>	<u>DF</u>	<u>Extracted</u>	<u>Analyzed</u>
Benzene	70	5.0	µg/L	10		12/15/05
Toluene	81	5.0	µg/L	10		12/15/05
Ethylbenzene	87	5.0	µg/L	10		12/15/05
m,p-Xylene	110	5.0	µg/L	10		12/15/05
o-Xylene	46	5.0	µg/L	10		12/15/05
Surrogate: Cis-1,2-Dichloroethylene	122	85-115	% Rec	10		12/15/05

Test Name: TPH as Gasoline

Reference: EPA 5030/GCFID(LUFT)/EPA 8015B

<u>Parameter</u>	<u>Result</u>	<u>Limit</u>	<u>Units</u>	<u>DF</u>	<u>Extracted</u>	<u>Analyzed</u>
TPHC Gas (C6-C14)	3,900	500	µg/L	10		12/15/05

Client Sample ID: MW-104
Lab ID: 0512138-06A

Received: 12/5/05

Collected: 12/5/05 15:25

Test Name: BTEX

Reference: EPA 5030/EPA 8021B

<u>Parameter</u>	<u>Result</u>	<u>Limit</u>	<u>Units</u>	<u>DF</u>	<u>Extracted</u>	<u>Analyzed</u>
Benzene	59	50	µg/L	100		12/15/05
Toluene	100	50	µg/L	100		12/15/05
Ethylbenzene	280	50	µg/L	100		12/15/05
m,p-Xylene	500	50	µg/L	100		12/15/05
o-Xylene	53	50	µg/L	100		12/15/05
Surrogate: Cis-1,2-Dichloroethylene	109	85-115	% Rec	100		12/15/05

Test Name: TPH as Gasoline

Reference: EPA 5030/GCFID(LUFT)/EPA 8015B

<u>Parameter</u>	<u>Result</u>	<u>Limit</u>	<u>Units</u>	<u>DF</u>	<u>Extracted</u>	<u>Analyzed</u>
TPHC Gas (C6-C14)	10,000	500	µg/L	10		12/15/05

Date: 19-Dec-05
 WorkOrder: 0512138

ANALYTICAL REPORT

Client Sample ID: M-3
 Lab ID: 0512138-07A

Received: 12/5/05

Collected: 12/5/05 14:50

Test Name: BTEX

Reference: EPA 5030/EPA 8021B

<u>Parameter</u>	<u>Result</u>	<u>Limit</u>	<u>Units</u>	<u>DF</u>	<u>Extracted</u>	<u>Analyzed</u>
Benzene	180	50	µg/L	100		12/15/05
Toluene	1,600	200	µg/L	400		12/15/05
Ethylbenzene	480	50	µg/L	100		12/15/05
m,p-Xylene	1,400	50	µg/L	100		12/15/05
o-Xylene	500	50	µg/L	100		12/15/05
Surrogate: Cis-1,2-Dichloroethylene	101	B5-115	% Rec	100		12/15/05

Test Name: TPH as Gasoline

Reference: EPA 5030/GCFID(LUFT)/EPA 8015B

<u>Parameter</u>	<u>Result</u>	<u>Limit</u>	<u>Units</u>	<u>DF</u>	<u>Extracted</u>	<u>Analyzed</u>
TPHC Gas (C6-C14)	14,000	500	µg/L	10		12/15/05

North Coast Laboratories, Ltd.

Date: 19-Dec-05

CLIENT: SHN Consulting Engineers and Geologists
Work Order: 05121138
Project: 097309, Blue Lake Belting and Leather

QC SUMMARY REPORT
Method Blank

Sample ID: MB-12/14/05	Batch ID: R388659	Test Code: BTXEN	Units: µg/L	Analysis Date: 12/15/05 4:48:11 AM			Prep Date:				
Client ID:		Run ID: ORGCB_051214C		SeqNo:	556477						
Analyte	Result	Limit	SPK value	SPK Ref Val	% Rec	Low Limit	High Limit	RPD Ref Val	% RPD	RPD Lmt	Qual
Benzene	ND	0.50									
Toluene	ND	0.60									
Ethylbenzene	ND	0.50									
m,p-Xylene	ND	0.50									
o-Xylene	ND	0.50									
Cis-1,2-Dichloroethylene	0.663	0.10	1.00	0	86.3%	85	115	0			
Sample ID: MB-12/14/05	Batch ID: R388657	Test Code: TPHC GW	Units: µg/L	Analysis Date: 12/15/05 4:48:11 AM			Prep Date:				
Client ID:		Run ID: ORGCB_051214B		SeqNo:	556443						
Analyte	Result	Limit	SPK value	SPK Ref Val	% Rec	Low Limit	High Limit	RPD Ref Val	% RPD	RPD Lmt	Qual
TPH Gas (C6-C14)	ND	50									

Qualifiers: ND - Not Detected at the Reporting Limit
 J - Analyte detected below quantitation limits

S - Spike Recovery outside accepted recovery limits
 R - RPD outside accepted recovery limits

B - Analyte detected in the associated Method Blank

North Coast Laboratories, Ltd.

Date: 19-Dec-05

CLIENT: SHN Consulting Engineers and Geologists

Work Order: 0512138

Project: 097309, Blue Lake Belting and Leather

QC SUMMARY REPORT

Laboratory Control Spike

Sample ID: LCS-05793	Batch ID: R38659	Test Code: BTXEW	Units: µg/L	Analysis Date: 12/15/05 12:52:00 AM			Prep Date:				
Client ID:	Run ID:	ORGCS_051214C		SeqNo:	556474						
Analyte	Result	Limit	SPK value	SPK Ref Val	% Rec	LowLimit	HighLimit	RPD RefVal	% RPD	RPD Limit	Qual
Benzene	5.104	0.50	5.00	0	102%	85	115	115	0		
Toluene	5.184	0.50	5.00	0	104%	85	115	115	0		
Ethylbenzene	5.218	0.50	5.00	0	104%	85	115	115	0		
m,p-Xylene	10.17	0.50	10.0	0	102%	85	115	115	0		
o-Xylene	4.986	0.50	5.00	0	99.7%	85	115	115	0		
Cis-1,2-Dichloroethylene	1.07	0.10	1.00	0	107%	85	115	115	0		
Sample ID: L-CSD-05793	Batch ID: R38659	Test Code: BTXEW	Units: µg/L	Analysis Date: 12/15/05 1:25:50 AM			Prep Date:				
Client ID:	Run ID:	ORGCS_051214C		SeqNo:	556475						
Analyte	Result	Limit	SPK value	SPK Ref Val	% Rec	LowLimit	HighLimit	RPD RefVal	% RPD	RPD Limit	Qual
Benzene	5.052	0.50	5.00	0	104%	85	115	115	1.02%	15	
Toluene	5.147	0.50	5.00	0	103%	85	115	5.18	0.703%	15	
Ethylbenzene	5.158	0.50	5.00	0	103%	85	115	5.22	1.15%	15	
m,p-Xylene	10.14	0.50	10.0	0	101%	85	115	10.2	0.215%	15	
o-Xylene	5.012	0.50	5.00	0	100%	85	115	4.98	0.515%	15	
Cis-1,2-Dichloroethylene	1.06	0.10	1.00	0	105%	85	115	1.07	0.948%	15	
Sample ID: LCS-05794	Batch ID: R38657	Test Code: THCHCGW	Units: µg/L	Analysis Date: 12/15/05 2:33:22 AM			Prep Date:				
Client ID:	Run ID:	ORGCB_051214B		SeqNo:	556440						
Analyte	Result	Limit	SPK value	SPK Ref Val	% Rec	LowLimit	HighLimit	RPD RefVal	% RPD	RPD Limit	Qual
THHC Gas (CB-C14)	481.0	50	500	0	98.2%	85	115	0			

Qualifiers:

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

S - Spike Recovery outside accepted recovery limits

B - Analyte detected in the associated Method Blank

R - RPD outside accepted recovery limits

QC SUMMARY REPORT
Laboratory Control Spike Duplicate

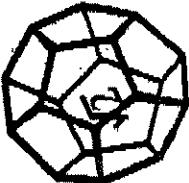
CLIENT: SHN Consulting Engineers and Geologists
Work Order: 0512138
Project: 097309, Blue Lake Belting and Leather

Sample ID: L:CSD-05794	Batch ID: #300657	Test Code: TP4GCSW	Units: $\mu\text{g/L}$	Analysis Date: 12/15/05 3:07:07 AM			Prep Date:				
Client ID:		Run ID: ORGC8_0512f4B	<th>SeqNo:</th> <td>556441</td> <td></td> <td></td>	SeqNo:	556441						
Analyte	Result	Limit	SPK value	SPK Ref Val	% Rec	LowLimit	HighLimit	RPD RefVal	%RPD	RPD Limit	Qual
TPHC Gas (C6-C14)	485.5	50	500	0	97.7%	85	115	481	0.946%	15	

Qualifiers: ND - Not Detected at the Reporting Limit
 J - Analyte detected below quantitation limits

S - Spike Recovery outside accepted recovery limits
 R - RPD outside accepted recovery limits

B - Analyte detected in the associated Method Blank



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707-822-4649 Fax 707-822-6834

Chain of Custody

0512138

LABORATORY NUMBER:

Attention:	Mike Faget
Results & Invoice to:	SHN
Address:	812 West Wabash Avenue
Phone:	Eureka, CA 95501 441-8855
Copies of Report to:	
Sampler (Sign & Print): <u>Mike Melody, A. D. Melody</u>	
Project Number:	097309
Project Name:	Blue Lake Belting and Leather
Purchase Order Number:	

SAMPLE MATRIX	
DW	100
DW	101
HW	102
HW	105
HW	103
HW	104
M	3

DW-100	12.5.05	1155	DW
MW-101		1230	
MW-102		1305	
MW-105		1335	
MW-103		1415	
MW-104		1525	
M - 3		1450	

SAMPLE DISPOSAL

- NCL Disposal of Non-Contaminated
- Return
- Pickup

CHAIN OF CUSTODY SEALS Y/N/NA
SHIPPED VIA: UPS Air-Ex Fed-Ex Bus (Hand)

TOTAL P. 22

ALL CONTAMINATED NON-AQUEOUS SAMPLES WILL BE RETURNED TO CLIENT

MATRIX: DW=Drinking Water; Eff=Effluent; Inf=Influent; SW=Surface Water; GW=Ground Water; S=Soil; O=Other.

Attachment 2

KEY: LABORATORY ABBREVIATIONS AND NOTATIONS - MONITORING WELL DATA

Blue Lake Market

410 Railroad Avenue, Blue Lake

LOP No. 17779; LACO Project No. 3888.01

KEY TO ABBREVIATIONS	
AL	-- action limit; a non-enforceable California drinking water standard; shown in parentheses.
BTEX	-- Benzene; Toluene; Ethylbenzene; m,p- and o- Xylenes
CO ₂	-- Carbon dioxide
COC	-- Chain of custody
CRWQCB	-- California Regional Water Quality Control Board
DHP	-- Down-hole-pump (submersible pump)
DIPE	-- Di-isopropyl Ether
DO	-- Dissolved Oxygen
DTW	-- Depth-to-Water
ECw	-- Electrical Conductivity in water
ETBE	-- Ethyl Tertiary Butyl Ether
FP	-- Free Product
MCL	-- Maximum contaminant level, an enforceable California drinking water standard.
MTBE	-- Methyl Tertiary Butyl Ether
ND<50	-- non-detect at reporting limits shown
NOT	-- Sample not analyzed for parameter
ACTIVE	-- during current sampling event
ORP	-- Oxidation Reduction Potential
PCE	-- Perchloroethene same as tetrachloroethene
pH	-- Potential of hydrogen
SGC	-- Silica gel cleanup
T	-- Temperature
TAME	-- Tertiary Amyl Methyl Ether
TBA	-- Tertiary Butyl Alcohol
TBF	-- Tertiary Butyl Formate
Tot	-- Taste and odor threshold, a non-enforceable California drinking water standard.
TPHg	-- Total Petroleum Hydrocarbons as Gasoline
µg/L	-- Micro grams per liter (parts per billion)
---	-- Not analyzed or not available

Note: Not all abbreviations in this key are used in this report.

¹ The laboratory noted that the sample did not have typical pattern of fresh gasoline.

All gasoline results reported represent the amount of material in the gasoline range of molecular weights only.

² The laboratory noted that some reporting limits was raised due to matrix interference.³ The laboratory noted that some results were reported ND with a dilution due to matrix interference.⁴ The laboratory noted that the surrogate for the sample was above the upper acceptance limit due to matrix interference.⁵ The laboratory noted that the sample is similar to gasoline but certain peak ratios are not that of a fresh gasoline standard.
The reported results represent the amount of material in the gasoline range.⁶ The laboratory noted that the sample was diluted and the reporting limits were raised additionally due to matrix interference.⁷ The laboratory noted that the surrogate for the sample could not be quantified due to a large amount of early eluting material.⁸ The laboratory noted that the sample did not present a peak pattern consistent with that of gasoline.
The reported results represent the amount of material in the gasoline range.⁹ The laboratory noted that the surrogate for the sample was reported as not quantifiable (NQ) due to an auto-injector malfunction.¹⁰ The laboratory noted that the sample was initially analyzed within the 14 day holding time, and additional dilutions for some analytes were required and were analyzed 1 day outside of the holding time.¹¹ The laboratory noted that the sample includes the reported gasoline components in addition to other peaks in the gasoline range.¹² The laboratory noted that the surrogate recoveries were below the lower acceptance limits for the sample.

The response of the reporting limit standard was such that the analytes would have been detected even with the low recoveries; therefore the data were accepted.

Attachment 3



Project

Name: **BLUE LAKE MARKET**

Tech: **RLD**

Project No.: **3888.01**

Mob/Demob time: **50/-50**

Date: **17-1-05**

Travel time: **1.0**

Global ID No.: **T0602300170**

Time on site: **11:00**

PM: **TDN**

Time off site: **1:00**

Mileage: **34**

WELL No.	MW1	MW2	MW4	MW5	MW3
DIAMETER (in)	2.0	2.0	1.5	1.5	2.0
SCREENED INTERVAL (ft)	5-15	4-14	10-15	10-15	5-15
DEPTH TO WATER (ft)	3.6	4.7	TD. 14.0	3.0	
	INITIAL	FINAL	INITIAL	FINAL	INITIAL
pH					
TEMP (°C)					
Ecw (μmhos)					
ORP (mV)	-12	24	12	17	-1
DO (mg/L)	0.48	0.46	0.72	0.48	0.72
OTHER (units)					
TIME	11:39	11:47	12:11	12:07	12:37
METHOD (DHP/CB/B)	DHP	DHP			
RATE (Lpm)	0.31	0.50			
VOLUME (L)	2.5	3.0			
COLOR	CLEAR	CLEAR	CLEAR	CLEAR	
ODOR	MED FUEL	LIGHT SULFUR			
INTAKE DEPTH (FEET)	MED SOIL	LIGHT FUEL			
TIME	11:49	12:19			
METHOD (DHP/CB/B)	DHP	DHP			
ANALYTES	TPHg/BTEX	TPHg/BTEX	TPHg/BTEX	TPHg/BTEX	MEASURE ONLY
TOTAL DRAWDOWN (FEET)	0.59	0.04			
REMARKS			DRY @ 14.0'		
WELL CONDITION	Good	Good	Good	Good	CAR PARKED OVER IT
WASTE DRUMS					

DHP=DOWN HOLE PUMP CB=CHECK BALL B=BAILER FD=FIELD DUPLICATE MB=METHOD BLANK FF=FIELD FILTERED



LACO ASSOCIATES

CONSULTING ENGINEERS

21 West Fourth Street, Eureka, CA 95501

TEL 707.443.5054

FAX 707.443.0553

Project Name: BLUE LAKE MARKET

Tech: R. L. D.
Date: 12-1-05

WELL ID: ANS

WELL ID:

WELL ID:

WELL ID:



LACO ASSOCIATES

CONSULTING ENGINEERS

21 West Fourth Street, Eureka, CA 95501

TEL 707.443.5054

FAX 707.443.0553

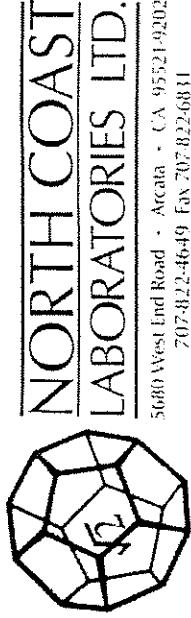
Project Name:

BLUE LAKE MARETT

Tech: ZLD

Date: 12-1-05

Project No.: 79-1969



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5680 West End Road • Arcata • CA 95521-0202
707.822.4649 Fax 707.822.6811

Chain of Custody

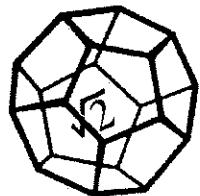
LABORATORY NUMBER:

Attention: <u>PAT FOLKINS</u>	Results & Invoice to: <u>2020 ARDAUGH COURT</u>	Address: <u>EUREKA, CA 95503</u>	Phone: _____	Copies of Report to: <u>Tim Nelson-JACO</u> <i>Tim Head</i>	Sampler (Sign & Print): <u>RLD</u>	ANALYSIS <u>TPHg/BTEX</u>	CONTAINER PRESERVATIVE <u>9</u>	TAT: <input type="checkbox"/> 24 Hr <input checked="" type="checkbox"/> 48 Hr <input type="checkbox"/> 5 Day <input type="checkbox"/> 5-7 Day <input checked="" type="checkbox"/> STD (2-3 WR) <input type="checkbox"/> Other: _____	PRIOR AUTHORIZATION IS REQUIRED FOR RUSHES	
								REPORTING REQUIREMENTS:		
								Preliminary: <input checked="" type="checkbox"/> FAX <input type="checkbox"/> Verbal <input type="checkbox"/> By: _____	Final Report: <input type="checkbox"/> FAX <input checked="" type="checkbox"/> Verbal <input type="checkbox"/> By: _____	
								STATE FORMS:		
								CONTAINER CODES: 1— $\frac{1}{2}$ gal. pl; 2—250 ml pl; 3—500 ml pl; 4—1 L Nalgene; 5—250 ml BG; 6—500 ml BG; 7—1 L BG; 8—1 L cp; 9—40 ml VOA; 10—125 ml VOA; 11—4 oz glass jar; 12—8 oz glass jar; 13—brass tube; 14—other		
								PRESERVATIVE CODES: a— HNO_3 ; b— HCl ; c— H_2SO_4 ; d— $Na_2S_2O_3$; e— $Na(OH)$; f— $C_2H_5O_2Cl$; g—other		
SAMPLE CONDITION/SPECIAL INSTRUCTIONS GEOTRACKER										
LAB ID	SAMPLE ID	DATE	TIME	MATRIX	RECEIVED BY (Sign)					DATE/TIME
3888-MW1-W	12-1-05	A.M.	GW	3						
3888-MW2-W		↑		3						
3888-MW5-W		↓		3						
3888-QCTB-W		PM	✓	1						
RELINQUISHED BY (Sign & Print)					CHAIN OF CUSTODY SEALS Y/N/NA					SAMPLE DISPOSAL
										<input type="checkbox"/> NCL Disposal of Non-Contaminated <input type="checkbox"/> Return
										<input type="checkbox"/> Pickup
										<input type="checkbox"/> Fed-Ex
										<input type="checkbox"/> Bus
										<input type="checkbox"/> Hand

* MATRIX: DW=Drinking Water; Eff=Effluent; Inf=Influent; SW=Surface Water; GW=Ground Water; S=Soil; O=Other.

ALL CONTAMINATED NON-AQUEOUS SAMPLES WILL BE RETURNED TO CLIENT

Attachment 4



**NORTH COAST
LABORATORIES LTD.**

December 12, 2005

Pvt. cust. paying on pickup

RECEIVED	
LACO ASSOCIATES	
DEC 13 2005	
BY:	JG

DRG
TDN

Attn: Pat Folkins

RE: 3888.01, BLUE LAKE MARKET

Order No.: 0512122
Invoice No.: 54926
PO No.: TASK 3031
ELAP No. 1247-Expires July 2006

SAMPLE IDENTIFICATION

Fraction	Client Sample Description
01A	3888-MW1-W
02A	3888-MW2-W
03A	3888-MW5-W
04A	3888-QCTB-W

ND = Not Detected at the Reporting Limit

Limit = Reporting Limit

All solid results are expressed on a wet-weight basis unless otherwise noted.

REPORT CERTIFIED BY

Laboratory Supervisor(s)

QA Unit

Jesse G. Chaney, Jr.
Laboratory Director

CLIENT: Pvt. cust. paying on pickup
Project: 3888.01, BLUE LAKE MARKET
Lab Order: 0512122

CASE NARRATIVE**TPH as Gasoline:**

Samples 3888-MW2-W and 3888-MW5-W appear to be similar to gasoline but certain peak ratios are not that of a fresh gasoline standard. The reported results represent the amount of material in the gasoline range.

The gasoline value for sample 3888-MW1-W includes the reported gasoline components in addition to other peaks in the gasoline range.

BTEX:

Some reporting limits were raised for samples 3888-MW1-W and 3888-MW5-W due to matrix interference.

The surrogate for sample 3888-MW1-W could not be quantified due to a large amount of early eluting material.

MTBE and benzene in sample 3888-MW2-W were reported as ND with a dilution due to matrix interference.

The laboratory control sample duplicate (LCSD) recovery was below the lower acceptance limit for MTBE. The laboratory control sample (LCS) recovery was within the acceptance limits; therefore, the data were accepted.

The relative percent difference (RPD) for the laboratory control samples was above the upper acceptance limit for MTBE. This indicates that the results could be variable. Since there were no detectable levels of the analyte in the samples, the data were accepted.

Date: 12-Dec-05
WorkOrder: 0512122

ANALYTICAL REPORT

Client Sample ID: 3888-MW1-W

Received: 12/2/05

Collected: 12/1/05 0:00

Lab ID: 0512122-01A

Test Name: BTEX

Reference: EPA 5030/EPA 8021B

<u>Parameter</u>	<u>Result</u>	<u>Limit</u>	<u>Units</u>	<u>DF</u>	<u>Extracted</u>	<u>Analyzed</u>
MTBE	ND	50	µg/L	1.0		12/10/05
Benzene	9.1	0.50	µg/L	1.0		12/10/05
Toluene	ND	15	µg/L	1.0		12/10/05
Ethylbenzene	3.4	0.50	µg/L	1.0		12/10/05
m,p-Xylene	2.4	0.50	µg/L	1.0		12/10/05
o-Xylene	ND	4.0	µg/L	1.0		12/10/05
Surrogate: Cis-1,2-Dichloroethylene	NQ	85-115	% Rec	1.0		12/10/05

Test Name: TPH as Gasoline

Reference: EPA 5030/GCFID(LUFT)/EPA 8015B

<u>Parameter</u>	<u>Result</u>	<u>Limit</u>	<u>Units</u>	<u>DF</u>	<u>Extracted</u>	<u>Analyzed</u>
TPHC Gas (C6-C14)	1,300	50	µg/L	1.0		12/10/05

Client Sample ID: 3888-MW2-W

Received: 12/2/05

Collected: 12/1/05 0:00

Lab ID: 0512122-02A

Test Name: BTEX

Reference: EPA 5030/EPA 8021B

<u>Parameter</u>	<u>Result</u>	<u>Limit</u>	<u>Units</u>	<u>DF</u>	<u>Extracted</u>	<u>Analyzed</u>
MTBE	ND	30	µg/L	10		12/10/05
Benzene	ND	5.0	µg/L	10		12/10/05
Toluene	6.9	5.0	µg/L	10		12/10/05
Ethylbenzene	63	5.0	µg/L	10		12/10/05
m,p-Xylene	160	5.0	µg/L	10		12/10/05
o-Xylene	7.0	5.0	µg/L	10		12/10/05
Surrogate: Cis-1,2-Dichloroethylene	91.0	85-115	% Rec	10		12/10/05

Test Name: TPH as Gasoline

Reference: EPA 5030/GCFID(LUFT)/EPA 8015B

<u>Parameter</u>	<u>Result</u>	<u>Limit</u>	<u>Units</u>	<u>DF</u>	<u>Extracted</u>	<u>Analyzed</u>
TPHC Gas (C6-C14)	1,500	500	µg/L	10		12/10/05

Date: 12-Dec-05
WorkOrder: 0512122

ANALYTICAL REPORT

Client Sample ID: 3888-MW5-W
Lab ID: 0512122-03A

Received: 12/2/05

Collected: 12/1/05 0:00

Test Name: BTEX

Reference: EPA 5030/EPA 8021B

<u>Parameter</u>	<u>Result</u>	<u>Limit</u>	<u>Units</u>	<u>DF</u>	<u>Extracted</u>	<u>Analyzed</u>
MTBE	ND	25	µg/L	1.0		12/10/05
Benzene	27	5.0	µg/L	10		12/10/05
Toluene	12	5.0	µg/L	10		12/10/05
Ethylbenzene	42	5.0	µg/L	10		12/10/05
m,p-Xylene	24	5.0	µg/L	10		12/10/05
o-Xylene	ND	7.0	µg/L	1.0		12/10/05
Surrogate: Cis-1,2-Dichloroethylene	89.8	85-115	% Rec	10		12/10/05

Test Name: TPH as Gasoline

Reference: EPA 5030/GCFID(LUFT)/EPA 8015B

<u>Parameter</u>	<u>Result</u>	<u>Limit</u>	<u>Units</u>	<u>DF</u>	<u>Extracted</u>	<u>Analyzed</u>
TPHC Gas (C6-C14)	1,400	50	µg/L	1.0		12/10/05

Client Sample ID: 3888-QCTB-W

Received: 12/2/05

Collected: 12/1/05 0:00

Lab ID: 0512122-04A

Test Name: BTEX

Reference: EPA 5030/EPA 8021B

<u>Parameter</u>	<u>Result</u>	<u>Limit</u>	<u>Units</u>	<u>DF</u>	<u>Extracted</u>	<u>Analyzed</u>
MTBE	ND	3.0	µg/L	1.0		12/10/05
Benzene	ND	0.50	µg/L	1.0		12/10/05
Toluene	ND	0.50	µg/L	1.0		12/10/05
Ethylbenzene	ND	0.50	µg/L	1.0		12/10/05
m,p-Xylene	ND	0.50	µg/L	1.0		12/10/05
o-Xylene	ND	0.50	µg/L	1.0		12/10/05
Surrogate: Cis-1,2-Dichloroethylene	87.3	85-115	% Rec	1.0		12/10/05

Test Name: TPH as Gasoline

Reference: EPA 5030/GCFID(LUFT)/EPA 8015B

<u>Parameter</u>	<u>Result</u>	<u>Limit</u>	<u>Units</u>	<u>DF</u>	<u>Extracted</u>	<u>Analyzed</u>
TPHC Gas (C6-C14)	ND	50	µg/L	1.0		12/10/05

North Coast Laboratories, Ltd.

Date: 12-Dec-05

CLIENT: Pvt. cust. paying on pickup

Work Order: 0512122

Project: 3888.01, BLUE LAKE MARKET

QC SUMMARY REPORT

Method Blank

Sample ID: MB12/9/05	Batch ID: R38521	Test Code: BTXEW	Units: µg/L	Analysis Date	12/10/05 1:20:54 AM	Prep Date:					
Client ID:		Run ID:	ORGC8_051209B	SeqNo:	554663						
Analyte	Result	Limit	SPK value	SPK Ref Val	% Rec	LowLimit	HighLimit	RPD Ref Val	%RPD	RPD Limit	Qual
MTBE	ND	3.0									
Benzene	ND	0.50									
Toluene	ND	0.50									
Ethylbenzene	ND	0.50									
m,p-Xylene	ND	0.50									
n-o-Xylene	ND	0.50									
NOx-1,2-Dichloroethylene	0.938	0.10	1.00		0	93.8%		85	115	0	
Sample ID: MB12/9/05	Batch ID: R38519	Test Code: TPHCGW	Units: µg/L	Analysis Date	12/10/05 1:20:54 AM	Prep Date:					
Client ID:		Run ID:	ORGC8_051209A	SeqNo:	554643						
Analyte	Result	Limit	SPK value	SPK Ref Val	% Rec	LowLimit	HighLimit	RPD Ref Val	%RPD	RPD Limit	Qual
TPHC Gas (C6-C14)	ND	50									

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Qualifiers: ND - Not Detected at the Reporting Limit
 J - Analyte detected below quantitation limits
 R - RPD outside accepted recovery limits

S - Spike Recovery outside accepted recovery limits
 R - RPD outside accepted recovery limits

B - Analyte detected in the associated Method Blank

North Coast Laboratories, Ltd.

Date: 12-Dec-05

CLIENT: Pvt. cust. paying on pickup
Work Order: 0512122
Project: 3888.01, BLUE LAKE MARKET

QC SUMMARY REPORT
Laboratory Control Spike

Sample ID: LCS-05783		Batch ID: R38521		Test Code: BTXEW		Run ID: ORGC8_051209B		Units: µg/L		Analysis Date 12/9/05 10:30:22 PM		Prep Date:	
Client ID:	Analyte	Result	Limit	SPK value	SPK Ref Val	% Rec	LowLimit	HighLimit	RPD Ref Val	% RPD	RPDLimit	Qual	SeqNo:
	MTBE	40.08	3.0	40.0	0	100%	85	115	0	0	0		554661
	Benzene	5.064	0.50	5.00	0	101%	85	115	0	0	0		
	Toluene	5.145	0.50	5.00	0	103%	85	115	0	0	0		
	Ethylbenzene	5.069	0.50	5.00	0	101%	85	115	0	0	0		
	m,p-Xylene	10.19	0.50	10.0	0	102%	85	115	0	0	0		
	n,o-Xylene	5.064	0.50	5.00	0	101%	85	115	0	0	0		
NORTH COAST LABORATORIES	Cis-1,2-Dichloroethylene	1.13	0.10	1.00	0	113%	85	115	0	0	0		
Sample ID: LCSD-05783		Batch ID: R38521		Test Code: BTXEW		Run ID: ORGC8_051209B		Units: µg/L		Analysis Date 12/10/05 9:15:09 AM		Prep Date:	
Client ID:	Analyte	Result	Limit	SPK value	SPK Ref Val	% Rec	LowLimit	HighLimit	RPD Ref Val	% RPD	RPDLimit	Qual	SeqNo:
	MTBE	31.03	3.0	40.0	0	77.6%	85	115	40.1	25.5%	15	SR	554678
	Benzene	4.738	0.50	5.00	0	94.8%	85	115	5.06	6.66%	15		
	Toluene	4.668	0.50	5.00	0	93.4%	85	115	5.14	9.72%	15		
	Ethylbenzene	4.666	0.50	5.00	0	93.3%	85	115	5.07	8.28%	15		
	m,p-Xylene	9.159	0.50	10.0	0	91.6%	85	115	10.2	10.7%	15		
	o-Xylene	4.497	0.50	5.00	0	89.9%	85	115	5.06	11.8%	15		
	Cis-1,2-Dichloroethylene	0.974	0.10	1.00	0	97.4%	85	115	1.13	14.6%	15		
Sample ID: LCS-05784		Batch ID: R38519		Test Code: TPHCGW		Run ID: ORGC8_051209A		Units: µg/L		Analysis Date 12/9/05 11:38:43 PM		Prep Date:	
Client ID:	Analyte	Result	Limit	SPK value	SPK Ref Val	% Rec	LowLimit	HighLimit	RPD Ref Val	% RPD	RPDLimit	Qual	SeqNo:
	TPHC Gas (C6-C14)	478.9	50	500	0	95.8%	85	115	0	0	0		554641

Qualifiers: ND - Not Detected at the Reporting Limit S - Spike Recovery outside accepted recovery limits
J - Analyte detected below quantitation limits R - RPD outside accepted recovery limits
B - Analyte detected in the associated Method Blank

QC SUMMARY REPORT

CLIENT: Pvt. cust. paying on pickup
Work Order: 0512122
Project: 3888.01, BLUE LAKE MARKET

Laboratory Control Spike Duplicate

Sample ID: LCSD-05784	Batch ID: R38519	Test Code: TPHCGW	Units: µg/L	Analysis Date: 12/10/05 9:49:02 AM	Prep Date:						
Client ID:	Run ID: ORGCB_051209A			SeqNo: 554652							
Analyte	Result	Limit	SPK value	SPK Ref Val	% Rec	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
TPHC Gas (C6-C14)	490.3	50	500	0	98.1%	85	115	479	2.35%	15	

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Qualifiers:

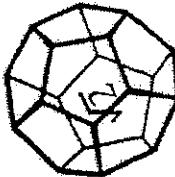
ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

S - Spike Recovery outside accepted recovery limits

B - Analyte detected in the associated Method Blank

R - RPD outside accepted recovery limits



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Chain of Custody

APPENDIX: DW=Drinking Water; Eff=Effluent; Inf=influent; SW=Surface Water; GW=Ground Water; S=Soil; O=Other.